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PROCEEDINGS
OF THE
CONNECTICUT
STATE MEDICAL SOCIETY
1917

125th ANNUAL CONVENTION

HELD AT

NEW HAVEN, MAY 23d and 24th, 1917

EDITOR

JOHN E. LANE

PUBLISHED BY THE SOCIETY

PRINTED, JULY, 1917

The Connecticut State Medical Society does not hold itself responsible for the opinions contained in any article unless such opinions are indorsed by special vote. All communications intended for the Connecticut State Medical Society should be addressed to John E. Lane, M.D., 59 College Street, New Haven, Conn.

The next annual meeting of the Connecticut State Medical Society will be held in Hartford, May 15th and 16th, 1918.

The next semi-annual meeting of the Connecticut State Medical Society will be held in conjunction with that of the Windham County Medical Association at Willimantic, October 18, 1917.

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OFFICERS OF THE SOCIETY.

1917-1918.

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Vice-Presidents.

PATRICK CASSIDY, M.D., Norwich.

CHARLES C. GODFREY, M.D., Bridgeport.

Secretary.

JOHN E. LANE, M.D., New Haven.

Treasurer.

PHINEAS H. INGALLS, M.D., Hartford.

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1917-1918.

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Ernest A. Wells.

Eli B. Ives.

The Secretary.

COMMITTEE ON MEDICAL EXAMINATIONS AND MEDICAL EDUCATION.

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Charles A. Tuttle.

Fritz C. Hyde.

John C. Rowley.

Seldom B. Overlock.

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C. J. Foote.

Frank K. Hallock.

C. C. Gildersleeve.

Eli P. Flint.

W. H. Donaldson.

C. E. Simonds.

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The Secretary.

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S. M. Garlick.

F. K. Hallock.

SPECIAL COMMITTEES.

COMMITTEE ON A SANATORIUM FOR THE NERVOUS POOR.

Frank K. Hallock, *Chairman*.

George Blumer.

John L. Buel.

Frederick T. Simpson.

Charles D. Alton.

COMMITTEE ON A STATE FARM FOR INEBRIATES.

Frank H. Barnes, *Chairman*.

Charles J. Bartlett.

Robert L. Rowley.

Arthur B. Coleburn.

Fritz C. Hyde.

COMMITTEE ON THE MEDICAL INSPECTION OF SCHOOLS.

Edward W. Goodenough, *Chairman*. Thomas G. Sloan.
Charles P. Botsford. J. J. Cohane.
Dorland Smith.

COMMITTEE ON NATIONAL LEGISLATION.

* D. Chester Brown.

COMMITTEE ON MEDICAL DEFENCE.

William R. Miller, *Chairman*.
Everett J. McKnight. Frank H. Wheeler.

COMMITTEE ON HOSPITALS.

Philip W. Bill.
Charles A. Tuttle. Fritz C. Hyde.

DELEGATES.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION.

D. Chester Brown. Edward T. Bradstreet.

DELEGATES TO STATE ASSOCIATIONS.

MAINE.

F. M. Tukey, Bridgeport. P. H. Ingalls, Hartford.

NEW HAMPSHIRE.

S. M. Garlick, Bridgeport.

VERMONT.

C. J. Bartlett, New Haven.

MASSACHUSETTS.

George M. Burroughs, Danielson.

RHODE ISLAND.

P. J. Cassidy, Norwich.

NEW YORK.

Fritz C. Hyde, Greenwich.

PENNSYLVANIA.

F. H. Barnes, Stamford.

HOUSE OF DELEGATES.

COUNCILORS.

HARTFORD COUNTY.

WALTER R. STEINER (reëlected).

NEW HAVEN COUNTY.

WILLIAM H. CARMALT.

NEW LONDON COUNTY.

PATRICK J. CASSIDY (reëlected).

FAIRFIELD COUNTY.

FRANK W. STEVENS (reëlected).

WINDHAM COUNTY.

ROBERT C. WHITE.

LITCHFIELD COUNTY.

ELIAS PRATT.

MIDDLESEX COUNTY.

GEORGE N. LAWSON (reëlected).

TOLLAND COUNTY.

THOMAS F. ROCKWELL.

DELEGATES.

HARTFORD COUNTY.

George R. Miller.

Harry C. Clifton.

Everett J. McKnight.

Thomas H. Welden.

Arthur R. Griswold.

Kenneth E. Kellogg.

Joseph Coogan.

NEW HAVEN COUNTY.

J. E. Lane.	J. F. Hayes.
W. L. Barber.	A. A. Crane.
H. G. Anderson.	F. N. Loomis.
C. J. Bartlett.	E. W. Smith.
E. H. Arnold.	W. E. Hartshorn.

NEW LONDON COUNTY.

E. P. Douglass.	C. C. Gildersleeve.
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FAIRFIELD COUNTY.

F. H. Barnes.	H. S. Miles.
F. I. Nettleton.	J. D. Gold.
W. S. Randall.	G. E. Ober.
	W. H. Donaldson.

WINDHAM COUNTY.

G. M. Burroughs.	S. B. Overlock.
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LITCHFIELD COUNTY.

Robert Hazen.	F. H. Lee.
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MIDDLESEX COUNTY.

A. B. Coleburn.	F. K. Hallock.
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TOLLAND COUNTY.

Thomas F. O'Loughlin.

STANDING COMMITTEES.

1916-1917.

COMMITTEE ON SCIENTIFIC WORK.

Wilder Tileston.	Ernest A. Wells.
	The Secretary.

COMMITTEE ON MEDICAL EXAMINATIONS AND MEDICAL EDUCATION.

John B. McCook.	Fritz C. Hyde.
J. Francis Calef.	Charles A. Tuttle.
	John C. Rowley.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION.

E. J. McKnight, <i>Chairman</i> .	George M. Burroughs.
C. J. Foote.	Ralph S. Goodwin.
C. C. Gildersleeve.	Frank K. Hallock.
W. H. Donaldson.	Eli P. Flint.
Paul Waterman, <i>Assistant to Chairman</i> .	
The President.	The Secretary.

COMMITTEE ON HONORARY MEMBERS AND DEGREES.

William H. Carmalt.	S. B. Overlock.
Max Mailhouse.	

SPECIAL COMMITTEES.

1916-1917

COMMITTEE ON A SANATORIUM FOR THE NERVOUS POOR.

Frank K. Hallock, <i>Chairman</i> .	George Blumer.
John L. Buel.	Frederick T. Simpson.
Charles D. Alton.	

COMMITTEE ON A STATE FARM FOR INEBRIATES.

Frank H. Barnes, <i>Chairman</i> .	Charles J. Bartlett.
Robert L. Rowley.	Arthur B. Coleburn.
Fritz C. Hyde.	

COMMITTEE ON THE MEDICAL INSPECTION OF SCHOOLS.

Edward W. Goodenough, <i>Chairman</i> .	Thomas G. Sloan.
Charles P. Botsford.	J. J. Cohane.
Dorland Smith.	

COMMITTEE ON NATIONAL LEGISLATION.

D. Chester Brown.

COMMITTEE ON PUBLIC HEALTH EDUCATION.

Kate C. Mead, <i>Chairman</i> .	William G. Coggsell.
Maude W. Taylor.	George M. Burroughs.
Harold S. Arnold.	Thomas F. Rockwell.
John G. Stanton.	Francis S. Skiff.
Florence A. Sherman.	Jessie W. Fisher.

COMMITTEE ON MEDICAL DEFENSE.

William R. Miller, *Chairman*.

Everett J. McKnight.

Frank H. Wheeler.

COMMITTEE ON HOSPITALS.

Philip W. Bill.

Charles A. Tuttle.

Fritz C. Hyde.

COMMITTEE ON REGISTRATION.

William H. Carmalt.

Laura H. Hills.

Albert R. Keith.

C. H. Turkington.

Willis E. Hartshorn.

J. H. Kingman.

L. F. LaPierre.

Eli P. Flint.

Eli B. Ives.

MINUTES OF THE HOUSE OF DELEGATES.

The first meeting of the House of Delegates was held at the Hotel Taft, New Haven, on Wednesday, May 23, 1917, at 9:30 A. M. The President, Samuel M. Garlick, was in the chair. The following were present: President Samuel M. Garlick, Secretary Marvin McR. Scarbrough; Councilors W. R. Steiner, Hartford County; Wm. H. Carmalt, New Haven County; P. J. Cassidy, New London County; Frank W. Stevens, Fairfield County; Robert C. White, Windham County; Elias Pratt, Litchfield County; George N. Lawson, Middlesex County, and Thomas F. Rockwell, Tolland County. Delegates: Hartford County—George R. Miller, Everett J. McKnight, Arthur R. Griswold, Harry C. Clifton, Thomas H. Welden, Kenneth E. Kellogg and Joseph Coogan. New Haven County—J. E. Lane, W. L. Barber, H. G. Anderson, C. J. Bartlett, E. H. Arnold, J. F. Hayes, A. A. Crane, F. N. Loomis, E. W. Smith and W. E. Hartshorn. New London County—John G. Stanton and W. K. Tingley. Fairfield County—F. H. Barnes, F. I. Nettleton, W. S. Randall, H. S. Miles, J. D. Gold, G. E. Ober and W. H. Donaldson. Windham County—G. M. Burroughs and S. B. Overlock. Litchfield County—Robert Hazen and F. H. Lee. Middlesex County—A. B. Coleburn and F. K. Hallock. Tolland County—Thomas F. O'Loughlin.

THE PRESIDENT: *Gentlemen and members of the House of Delegates:* The business of the Society devolves upon you and I would urge a responsibility which all delegates should feel. Each one should make it a special duty to be present at all the sessions of this body. Quoting the remark of the late Dr. Gilbert, "No man should accept the appointment merely as a personal compliment but should realize that its acceptance means responsibility and work." Let it also be understood that all the members of the Society are at liberty to attend all the meetings of

the House of Delegates and take part in the discussion if they so desire.

In opening this first meeting of the House of Delegates I am happy to congratulate you on the generally satisfactory condition of medical affairs in the State of Connecticut and of our Society in particular. The year now closed has not been one of unusual activity in our domestic relations. The Council has been attentive to all matters properly coming before it. I beseech your earnest attention to the report of the same by its efficient chairman, Dr. William H. Carmalt. So quietly did the wheels of time move round that the President would scarcely have been made conscious of passing events were it not for the recurring delightful county meetings and the courteous invitations to the annual conventions of neighboring states.

After these introductory remarks by the President, the following reports were read, accepted and ordered on file.

(1) Report of the President, Dr. Samuel Middleton Garlick (Bridgeport):

REPORT OF THE PRESIDENT.

Ladies and Gentlemen, Members of the House of Delegates:

The business of the Society devolves upon you, and I would urge the responsibility which all delegates should feel. Each one should make it a special duty to be present at all the sessions of this body. Quoting the remark of the late Dr. Samuel D. Gilbert, "No man should accept the appointment merely as a personal compliment, but should realize that its acceptance means responsibility and work." Let it also be understood that all the members of the Society are at liberty to attend all the meetings of the House of Delegates and take part in the discussion if they so desire.

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in particular. The year now closing has not been one of unusual activity in our domestic relations. The Council has been attentive to all matters properly coming before it. I bespeak your earnest attention to the report on the same by its efficient Chairman, Dr. W. H. Carmalt.

So quietly do the wheels of time move round, that the President would scarcely have been made conscious of passing events, were it not for the recurring delightful County meetings, and the courteous invitations to the Annual Conventions of neighboring States. Of these latter I would make especial mention of New Jersey and New York. It was my purpose and plan to accept both in person, as representative of this Society, but at the last moment, the best laid plans go oft awry. However, telegraphic letters, congratulatory in the name of the Connecticut Medical Society, were sent. If received, no acknowledgment has been made.

It has been an unusual pleasure to attend the excellent meetings of the County Associations, to get in touch with the charming spirit of the members in their own home territory; and as well also to partake of their generous hospitality. My appreciation and esteem of my compatriots and fellow confreres has been greatly enhanced by these fellowship meetings. I would especially urge the better attendance of the visiting delegates; the hearty hand-shake, the kindly word and sympathetic touch, elbow to elbow, does us all good, and makes our hearts warmer one toward the other.

The delegates to the various State Societies have attended to their duties, some earnestly, and others, perhaps, more indifferently. I believe some very interesting reports may be made. These reports properly belong to the whole Society and should be made thereto, in open meeting. Such opportunity would benefit the whole body of members, and in turn would react upon the delegates themselves, making them attentive to duty and interested to report. I commend this proposition to your consideration for suggestions.

In conjunction with this, a larger matter occurs to me. Many times we have heard the remark, "We ought to have general

meetings of the Society, when matters pertaining to subjects of general character or having wide interest to physicians of the State, can be presented or discussed in committee of the whole." I believe one or two such meetings of the whole Society at each Annual Convention would be wise. We are essentially a democratic profession and everyone desires to come in personal contact with affairs having a common interest. I know that in some States such general meetings and sessions are held, sometimes separately from, and sometimes including portions of the regular scientific programme. It is not well for us to be credited, as we now are, with being a "close corporation." Let the sunshine in. I also commend this suggestion to your consideration.

Our genial Secretary, Dr. Marvin McR. Scarbrough, having served us for several years and being pressed by the demands of his professional work and added duties incident to "Medical Preparedness," declines renomination. He is entitled to the appreciative thanks of this Society for his conscientious labor. Any man who can conduct the work devolving upon our Secretary, as a side issue, and for the moderate compensation received, must, indeed, be a worker and indefatigable. Some measure should be adopted, and some means should be provided, whereby the annual report of the Proceedings can be placed in the hands of each member at a much earlier date than is now practicable. Perhaps it may be well that the various addresses and the really valuable scientific papers presented each year shall be decently interred in the dusty archives of a neatly bound "Annual Report" after being passed upon by our Coroner's Medical Examiner; but, even if so, it is destructive of interest in all the work. It is especially to be deplored that we cannot sooner have reports of the acts of the Council and the doings of the House of Delegates. And let us hope that within a reasonably short time thereafter we may have full reports of the transactions. The issuance of the Acts of the Council and the minutes of the House of Delegates, together with the reports of Committees in pamphlet form, mailed to each member shortly after convention would be a measure of relief and perhaps not very expensive. A further consideration of this matter by your body is desirable.

Since our last Annual Convention our country has accepted the challenge of "Kultur" and "Autocracy" and we are at war. The Committee of American Physicians for Medical Preparedness, with the full sanction of the Federal Government has placed before the medical profession the inevitable demands which are thus forced upon us, and has asked the coöperation of the various State Medical Societies in obtaining a careful inventory of the medical resources of the country. Your President, made a member of the Sub-State Committee for Connecticut, has, so far as possible, made constructive the loyalty of our members, and made coöperative the various component Associations. Either at their regular meetings or at a meeting called especially therefor, all the County Associations have authorized such activities as were requested or which promised to be helpful. Dr. Joseph M. Flint, a member of this Society and of international reputation, and also a member of the Council for National Defense, has cordially and efficiently directed the efforts of various subcommittees. At Dr. Flint's invitation, and because of the very great tax upon Dr. Flint by his complex and important duties at Washington, Dr. David Chester Brown, of Danbury, has acted as Vice Chairman of our State Committee. It is hoped that one or both of these gentlemen will present the subject more perfectly and in more complete detail at a suitable time during the Convention. Your action, concurrent with or enlarging that of the County Associations, may be desirable. It is particularly important that you shall consider the proposed financial relations of our members to the practise and care of patients left by physicians called to the service of the nation. This is a time of melting together of all loyal forces and for the coöperation of all patriotic citizens of whatever school or class. In conjunction with the efforts of our Associations, all legally qualified medical men in the State have been invited to act. I hope any measure or act adopted by the House of Delegates will be equally broad in scope and thus contribute to mutually cordial relations between all medical practitioners.

I have a letter from the president of the "Allied Temperance Forces" in this State asking this Society as "A War Emergency"

to endorse the proposition to prohibit or limit the sale and use of liquor for the period of the war; and second, to endorse the proposition to stop the use of grain in the manufacture of liquor "as a food conservative measure"; and, third, to endorse the submission of the State-wide Prohibition Amendment for a vote by the people. This is submitted for such action as you may consider worthy.

I also present a letter from the Vice Chairman of the United States Employees' Compensation Commission, Washington, D. C., asking coöperation of this Society, and statement of opinion concerning "free choice of physician"; what would be considered "a just minimum fee for each class of injury in this State" and the "prevalent per cent of deduction in this State for governmental work."

Thanking you each and all for the cordial coöperation and aid during the year about to close, and bespeaking your individual efforts in successfully carrying out the exceptionally fine programme provided by the Committee on Arrangements and Scientific Work, I now declare the 125th Annual Convention of the Connecticut Medical Society open for the transaction of business and ask your attention to the reports of the Secretary, the President of the Council, the Treasurer, and the various committees.

SAMUEL M. GARLICK,

President.

Letter from the President of the Allied Temperance Forces.

May Seventeenth, 1917.

SAMUEL M. GARLICK, M.D., Bridgeport, Conn.

My dear Dr. Garlick:

I notice by the press that the Connecticut State Medical Society will hold its annual session at the Hotel Taft on the 23d and 24th of this month, and I venture to write you upon an important matter regarding which I believe the medical fraternity can render a great service, and that is, in connection with the prohibition of the manufacture and sale of liquors.

I have noticed in my travels through the country, that Medical Societies in various cities and States have taken action concerning this matter,

either from the standpoint of a war emergency measure, or even much further than that, with regard to absolute prohibition.

It has been very gratifying to find many physicians who have reached the conclusion that alcohol has very little, if any use as a medicine, and that whiskey has been barred from the "Pharmacopœia."

It seems an opportune time for your State Convention to, first, indorse the proposition to prohibit or limit the sale and use of liquor for the period of the war. Second, to indorse the proposition to stop the use of grain in the manufacture of liquor, as a food conservation measure, and, third, to indorse the submission of the State Wide Prohibition amendment for a vote by the people. This amendment has passed through the present Legislature in its first stage, and must receive the approval of the next General Assembly by two-thirds vote in both Houses.

Many members of the medical fraternity have given public indorsement of the Prohibition question, and it would seem to me that the men who comprise the State Medical Association have a very vital interest in this matter.

I shall be very pleased indeed, in behalf of the Allied Temperance Forces of the State, to receive through your Secretary, any action that the Medical Society may take on this important matter.

Will you please advise me as to what you think concerning this subject, and if you will call the attention of the Society to it?

Sincerely yours,

E. L. G. HOHENTHAL,

President of the Allied Temperance Forces.

Letter from the Vice Chairman of the United States Employees' Compensation Commission, Washington, D. C.

April 28, 1917.

DR. SAMUEL M. GARLICK,

President of the Medical Association of Connecticut,
Bridgeport, Conn.

Dear Doctor:

The United States Employees' Compensation Commission is desirous of securing the coöperation of your state organization in the administration of the Federal law for compensation. Will you kindly inform us:

1st: If you have an established fee bill?

2nd: If the Commission establishes a principle of allowing each patient free choice of physician, what would be considered a just minimum fee for each class or injury as it might obtain in your state?

3rd: What per cent of deduction of fees prevail in your state for government work?

The Commission has decided to coöperate with the Public Health Service wherever that service is available in carrying out the intent of the law in furnishing medical and surgical relief to civilian employees, and Surgeon B. W. Warren of that Service has been detailed by Surgeon General Blue to act as the medical director of this work in the coöperation of this service with our Commission.

The Commission will greatly appreciate a speedy reply to this letter and any suggestions you may have to make to assist in this stupendous task which is now being formulated by us.

A franked envelope, which requires no postage, is inclosed for your reply.

Very truly yours,

MRS. FRANCES C. AXTELL,

Vice-Chairman.

(2) Report of the Secretary, Dr. Marvin McR. Scarbrough (New Haven):

REPORT OF THE SECRETARY.

Mr. President and Members of the House of Delegates:

The year has been uneventful as regards the Connecticut State Medical Society as such. The County Societies held their usual Fall and Spring Meetings with average attendance. Owing to the intensity of specialization in the profession, it is becoming increasingly difficult to supply programmes which present something that is of interest to and yet not too technical for the majority of the members. It is perhaps not amiss to suggest that the County Secretaries might get much assistance in the preparation of the programmes by closer coöperation with each other and with the State organization. Such an arrangement would prevent too great overlapping of programmes, provide special features, etc., which would stimulate interest and attendance. As the By-Laws do not detail such duties to any special committee, the work of the Committee on Scientific Work is not so burdensome but that it could assume such duties. It does not seem advisable to have a new committee formed for such purpose, as the State Society is overrun with special committees.

The Semi-Annual Meeting was held in conjunction with the Litchfield County Medical Association instead of the Fairfield County Medical Association. This was brought about by the innovation of holding the Annual Meeting at Bridgeport. The Semi-Annual Meeting was held at the recently-opened Charlotte Hungerford Hospital at Torrington on October 3, 1916. The attendance was unusually good, visitors coming from all parts of the State. Opportunity was given for members to inspect the Hospital. The trustees of the Hospital gave a complimentary luncheon at 12:30 P. M. The Scientific Programme was of good quality and evoked considerable discussion. If the established order is continued the next Semi-Annual Meeting should be held with Windham County.

The members of the Society in good standing now number 1,021, which is 74 greater than reported last year. This unusual increase is accounted for by the efforts of L. P. Van Duzer, official organizer of the American Medical Association, who visited this State last summer and secured 52 acceptable names. If the 13 honorary and 16 suspended members are included, the membership is 1,037.

The following list comprises the new members admitted at the Fall Meeting last year and the Spring Meeting this year. There are in all 111 names.

NEW MEMBERS.

- A. William Branon, Jefferson, 1913, Hartford.
Harold Morris Brown, Jefferson, 1913, Suffield.
Harry A. Elcock, Yale, 1891, New Britain.
Leroy A. Hovey, Univ. of Vt., 1910, Southington.
LeVerne Holmes, Boston Univ. Homeo. School of Medicine, 1904, South Manchester.
James F. Lynch, P. & S., Balt., 1913, Hartford.
James Raglan Miller, Hopkins, 1910, A.B. Yale, 1907, Hartford.
D. C. Y. Moore, N. Y. Homeo., 1895, Manchester.
Sidney Horace McPherson, Tufts, 1913, Hartford.
Harry Jay Onderdonk, N. Y. Univ., 1897, East Hartford.
Spotswood H. Parker, Univ. of Virginia, 1904, Hartford.
Fannie Radom, Pa., Women's Med., 1912, Hartford.
Frank F. Simonton (A.B. Wesleyan), Bowdoin, 1903, Thompsonville.

- Charles Ransom Upson, L. I. Col., 1870, Bristol.
McCleod C. Wilson, Cornell, 1904, Hartford.
Thatcher Washburn Worthen (A.B. Dartmouth), Dartmouth, 1911, Hartford.
Arthur Brownell Wright (A.B. Union), P. & S., N. Y., 1895, Hartford.
C. Charles Burlingame, Hahn. Chiro., 1908, South Manchester.
James Elder Hutchinson, Hopkins, 1914, A.B. Ohio State Univ., 1909, Hartford.
Carl J. Kilbourn, Univ. of Vt., 1914, Collinsville.
Carl Frithrop Vernlund, Harvard, 1914, B.S. So. Dakota State, 1909, Hartford.
Thornton E. Vail, Hopkins, 1911, Ph.B. Yale, 1907, Thompsonville.
Edwin Smith Vail, N. Y. Homeo. Med. School, 1882, Hartford.
Francis E. Gessner, Yale, 1912, New Haven.
Donald W. Porter, Harvard, 1912, New Haven.
Anthony P. Vastola, Fordham Univ., 1912, Waterbury.
Arthur S. McQueen, Yale, 1901, Branford.
Michael F. Claffey, Univ. of Vt., 1914, Naugatuck.
Thomas A. O'Brien, Yale, 1902, New Haven.
Genesis F. Carelli, Yale, 1911, New Haven.
Albert L. Hendricks, Yale, 1907, New Haven.
William P. Baldwin, Yale, 1890 (N. Y. Homeo, 1891), New Haven.
Charles T. Baldwin, Bell Med. Col., 1883, Derby.
C. H. Mercer, Maryland Med. Col., 1905, Ansonia.
Fred J. Peck, Mich. Univ. Homeo. Dept., 1892, Ansonia.
William P. J. Burke, Yale, 1890, New Haven.
Michael S. Aaronson, N. Y. Univ., 1913, Ansonia.
Henry W. Beckwith, Dartmouth Med. Col., 1912, Seymour.
Frederic DeWitt Smith, Hahn. (Phil.), 1910, Guilford.
Donald G. Russell, Yale, 1914, Wallingford.
C. F. Smith, N. Y. Homeo. Col., 1884, Wallingford.
D. A. Richardson, Yale, 1881, Derby.
William J. Cooney, Yale, 1912, New Haven.
Robert A. Bonner, Univ. of Maryland, 1912, Waterbury.
Raymond J. Quinn, Phys. and Surg., Balt., Md., 1913, Waterbury.
John H. McGrath, Yale, 1908, Waterbury.
P. S. Anderson, N. Y. Homeo. Med. Col., 1913, Waterbury.
John J. Egan, Univ. of Maryland, 1907, Waterbury.
Carleton K. Heady, Jeff. Med., 1913, Milford.
Thomas F. Healy, L. I. Med. Col., 1908, Waterbury.
Isacco DeLuise, Naples Univ., 1903, Waterbury.
Michael D. Riordan, Univ. of Vt., 1912, Waterbury.
William H. Morriss, Johns Hopkins, 1912, New Haven.
William T. Merrill, Dartmouth, 1890, New Haven.

- Joseph A. Hoegen, N. Y. Homeo., 1915, New Haven.
William T. Collins, Yale, 1904, New Haven.
Simon B. Kleiner, Yale, 1915, New Haven.
David A. Flynn, Yale, 1905, Ph.B. Yale, New Haven.
Paul B. Kennedy, Bellevue, 1895, Derby.
James F. Young, P. & S., N. Y., 1913, New London.
John W. Callahan, P. & S., Balt., 1911, Norwich.
George P. Cheney, Maryland Med. School, 1913, New London.
Albert C. Freeman, Univ. of Vt., 1913, Norwich.
John H. McLaughlin, P. & S., Balt., 1909, Jewett City.
Ross Elliott Black, P. & S., N. Y., 1905, New London.
John T. Black, Hahn. Med. Col., 1894, New London.
William T. Driscoll, P. & S., Balt., 1912, Norwich.
John Stanley Blackmar, P. & S., N. Y., 1898, Norwich.
Louis Irving Pratte, Quebec, 1879, Taftville.
Daniel T. Banks, Fordham, 1912, Bridgeport.
Joseph Cohen, Med. Col., N. Y., 1909, A.B. Col. City of N. Y., 1894, Bridgeport.
James J. Costanzo, Univ. of Ill., Stamford.
George Eversleigh Cram, P. & S., N. Y., 1901, Ph.B. Yale, 1897, Norwalk.
Edward Wilson Dupee, Univ. of Maryland, 1900, Bridgeport.
Carl Johannas Gade, Yale, 1910, Bridgeport.
Daniel Patrick Griffen, Jeff., 1914, Bridgeport.
Thomas Francis Healy, Niagara, 1893, Bridgeport.
George B. Garlick, Yale, 1912, Bridgeport.
James Lowry Gilday, Med. Col., Cin., 1913, Bridgeport.
Martin Isadore Horn, Med. Col., N. Y. City, 1912, N. Y. Homeo. Med. Col. & Flower Hosp., 1913, Bridgeport.
Walter H. Kiernan, McGill, 1898, Sandy Hook.
Don Jerome Knowlton, Harvard, 1912, A.B. Harvard, Greenwich.
John Francis Quinn, Balt. Med., 1906, Bridgeport.
Upton S. Reich, Univ. of Va., 1909, Bridgeport.
Thomas F. Scanlon, Yale, 1907, Bridgeport.
Maurice Steinberger, Royal Hung. Univ. of Buda Pesth, 1889, Med. Col. of N. Y., 1909, A.B. Coll. Col., Bridgeport.
Harry Leslie Stilphen, Univ. of Vt., 1913, Shelton.
Edwin B. Welden, P. & S., Balt., Bridgeport.
Henry Willard Allen, Med. Chi., 1909, Ridgefield.
John Thomas H. Powers, P. & S., Balt., 1910, Bridgeport.
Edward J. Frim, Yale, 1910, Shelton.
William Earl Smith, Univ. of Mich., 1910, Stamford.
William Champion Deming, P. & S., N. Y., 1884, Georgetown.
Aaron Billings Gates, L. I. Hosp., 1912, Greenwich.
George Anthony Davis, Jeff., 1903, Bridgeport.

Joseph Napoleon Perrault, Tufts, 1907, Danielson.
Nathaniel Hibbard, Harvard, 1882, Danielson.
Ermlieu Roch, Montreal Vic. School, 1890, North Grosvenor Dale.
Francis Joseph O'Brien, Fordham, 1913, Middletown.
Gerardo G. Petrocelli, Univ. of Naples, Italy, 1905, Middletown.
James William Dawson, Toledo, 1894, Stafford Springs.
Floyd Albert Weed, Albany, 1912, Torrington.
James Joseph Tynan, P. & S., Balt., 1907, Torrington.
Lawrence Dillon Neary, Georgetown, 1913, Torrington.
Wallace Elsworth Hoffman, Hahn. Chi., 1905, Torrington.
Harry Bailey Chapin, Georgetown, 1908, Torrington.
William Clement Kennedy, Georgetown, 1910, Torrington.
Thomas Leonard Thomson, Hahn. Phil., 1901, Torrington.
Marvin Zabriski Westervelt, N. Y. Homeo., 1899, Litchfield.
Florizel Janvier, Univ. of Vt., 1913, New Hartford.
Albert L. Tuttle, Albany, 1888, Kent.

The Society has lost through death ten members as reported by the County Secretaries. The list follows:

Jean Dumortier, South Norwalk.
Frank A. Elmes, Derby.
Josaphat Gaucher, Putnam.
Frederick Gilnack, Rockville.
Charles R. Hart, Bethel.
Fred P. Lane, New Haven.
George D. Stanton, Stonington.
James L. Sullivan, Bridgeport.
Henry G. Varno, Thompsonville.
Frederick B. Willard, Hartford.

In the Summer of 1912, I was asked by Dr. Wilder Tileston, who had been elected Secretary of this Society, to assist him in the work as he was busily engaged in scientific work and also, would be away during the Summer. I accepted. Later in the year, Dr. Tileston was taken ill and I acted as Secretary, pro tempore. Since that time there has been begun changes of profound nature in the social structure of industrial life of which the medical profession must take cognizance and to which it must adjust itself. These movements, together with the involvements of the great war, have at times greatly added to the routine duties of the State Secretary. After five years of secretarial

duties, I regret that I am obliged to give up the work on account of pressure of medical and other duties. I have enjoyed the work. I wish to thank the members for their helpful coöperation.

A table showing changes in membership is appended.

Total Membership	County Associations	Members in Good Standing	New Members	Reinstatements	By Transfer	Deceased	Removed	Resigned	Suspended	Gain	Loss
250	Hartford County	244	23	0	0	2	4	0	6	13	0
330	New Haven County	325	36	1	1	2	1	0	5	30	0
71	New London County	69	10	0	0	1	0	1	2	6	0
214	Fairfield County	211	26	0	0	3	1	0	3	19	0
37	Windham County	37	3	0	0	1	0	0	0	2	0
72	Litchfield County	72	10	0	0	0	2	0	0	8	0
46	Middlesex County	46	2	1	0	0	2	0	0	3	0
17	Tolland County	17	1	0	0	1	0	0	0	0	0
1,037		1,021	111	2	1	10	10	1	16	81	0

Respectfully submitted,

M. McR. SCARBROUGH,

Secretary.

(3) Report of the Chairman of the Council, Dr. William H. Carmalt (New Haven):

REPORT OF THE CHAIRMAN OF THE COUNCIL.

Mr. President and Members of the House of Delegates:

The Council has held two meetings during the current year of the Society: The first for organization on May 18, 1916, at which Dr. W. H. Carmalt was elected Chairman; Dr. W. R. Steiner of Hartford County and Dr. C. J. Bartlett of New Haven County and the Secretary were made the Publication Committee and that the Auditors for the ensuing year be Dr.

W. R. Steiner of Hartford and T. F. Rockwell of Rockville. The salary of the Secretary for the year was determined at \$150.

The second meeting was held at Hartford on April 28, 1917, at which all the members were present except the Secretary, who was absent on account of illness. Dr. Steiner was appointed Secretary pro tem.

A free discussion of the duties of the Society towards the Government on account of the war was held, but as under the Constitution such matters come to the House of Delegates for consideration the discussion in the Council was quite informal and no action taken.

The following vote was passed, viz: That members enlisted in public service by the Government be exempt from dues during their period of service.

The following nominations for officers for the ensuing year is respectfully presented, viz.:

President.

EDWARD K. ROOT, Hartford.

Vice-Presidents.

PATRICK CASSIDY, Norwich.

CHARLES C. GODFREY, Bridgeport.

Secretary.

JOHN E. LANE, New Haven.

Treasurer.

PHINEAS H. INGALLS, Hartford.

Committee on Scientific Work.

Ernest A. Wells, Hartford. Eli B. Ives, Bridgeport.

Committee on Medical Examination and Medical Education.

SELDOM B. OVERLOCK, Pomfret.

Committee on Public Policy and Legislation.

Everitt J. McKnight, Hartford County.
 Charles J. Foote, New Haven County.
 Charles C. Gildersleeve, New London County.
 William H. Donaldson, Fairfield County.
 Charles E. Simonds, Windham County.
 Ralph S. Goodwin, Litchfield County.
 Frank H. Hallock, Middlesex County.
 Eli P. Flint, Tolland County.

Committee on Honorary Members and Degrees.

Samuel M. Garlick, Bridgeport.
 Max Mailhouse, New Haven. Frank K. Hallock, Cromwell.

Delegate to the American Medical Association.

Edward T. Bradstreet, Meriden.

Delegates to State Association.

Maine—F. M. Tukey; P. H. Ingalls.
 New Hampshire—S. M. Garlick.
 Vermont—C. J. Bartlett.
 Massachusetts—George M. Burroughs.
 Rhode Island—Patrick J. Cassidy.
 New York—F. C. Hyde.
 New Jersey—
 Pennsylvania—F. H. Barnes.

WILLIAM H. CARMALT,
Chairman.

(4) Reports of the Councilors from the different County Societies of the State:

REPORT OF THE COUNCILORS.

(a) Hartford County, by Dr. Walter R. Steiner:

Mr. President and Gentlemen of the House of Delegates:

The Hartford County Medical Association has had a prosperous year. We now have two hundred and forty-five members,

having received twenty-three new ones; four have resigned on account of their removal from the State, one has been suspended, three have been dropped for non-payment of dues, and four have died. As the writer of Ecclesiasticus says, "There be of them that have left a name behind them that their praises might be reported. And some there be, who have no memorial: who are perished, as though they had never been." In this former group we find the names of our deceased members, Frederick Buell Willard, Henry George Varno, Edward Bradbury Lyon, and William Sanford Kingsbury. Their obituaries will be found in the transactions of this Society, that of Dr. Willard having already appeared. Two successful meetings have been held during the year, at which two out-of-town physicians have spoken. Dr. Elliott P. Joslin of Boston was the speaker at the fall meeting. He spoke on the treatment of diabetes mellitus; while this spring Dr. Henry A. Christian, Professor of Medicine at the Harvard Medical School, discussed the classification of cases of nephritis. All of the hospitals in the county have been crowded during the year, and the Medical Library at the Hunt Memorial has sought to increase its usefulness to the Medical Society and the community at large by enlarging its library in all the fields of medicine. Ninety-seven current periodicals are now on file in the reading room, and the stacks contain about eight thousand volumes.

We are at the beginning of a great war, a war that should fire our patriotism and arouse in each one of us a boundless enthusiasm to give our country the best possible service. For this purpose an organization, designated the State Committee of the Council for National Defense, has had its origin. In each county in the State we find a committee to consider the means necessary for the county to raise its proper quota of physicians to act during the duration of the war. We are endeavoring to see to it that Hartford County will not lag behind the other counties in furnishing its full quota of medical men. The state in which Nathan Hale had both his birth and residence should again come to the forefront in its patriotism. We should call to mind his last words when he said, "My only regret is that I can give but one life for my country."

"There is no fitter end than this,
No need is now to yearn nor sigh,
We know the glory that is his,
A glory that can never die."

Respectfully submitted,

WALTER R. STEINER,
Councilor.

(b) New Haven County, by Dr. William H. Carmalt:

Mr. President and Members of the House of Delegates:

The two regular meetings of the New Haven County Medical Association were held at Waterbury and New Haven respectively.

At the semi-annual meeting held in October, 1916, a number of good papers were read by members and one by invitation by Prof. Frederick P. Gay of the University of California on "The Treatment of Typhoid Fever by Vaccines," in which the advantages and limitations of this method were clearly stated.

At this meeting thirty-two new members were elected. This unusually large number was brought about mainly through the efforts of Mr. van Duzer working primarily in the interest of the Journal of the American Medical Association, with the soliciting for new members for the County Association as a by-product, as was fully set forth in the Councilor's report for last year.

At the annual meeting in April of the current year, before the reading of the scientific papers a hearing was given to the Auxiliary National Medical Defense Committee to state the aims desired by the United States Government in the enlistment of physicians for the war, to report upon the results thus far obtained, to urge further enlistments and to discuss plans to further these ends. Drs. Edward T. Bradstreet, Edward S. Moulton, D. Chester Brown, and Augustin A. Crane spoke. The plan adopted by the Medico-Chirurgical Faculty of Maryland, this being the name of the State Society, was read. As this has been presented at various times and ways to the members of this Society, it is not necessary to weary you with repeating it in

full, simply stating that it recommends that members of the Society who remain at home, should agree to care for the patients of those who enlist, on a percentage basis, and return, so far as possible, the patients to the physician enlisting on his return. The percentage voted by the New Haven County was on a 50-50 basis. As a result of the report and the addresses fifty-five members have signified their intention of entering the government service.

In the morning a surgical clinic was held at the Hospital of St. Raphael by Dr. Verdi, and in the afternoon a clinical conference at the New Haven Hospital by the Department of Obstetrics and Gynecology of Yale University, participated in by Prof. J. Morris Slemons and his assistants, Drs. Arthur Morse and William H. Morris.

After the business of the National Medical Defense Committee was disposed of, the regular programme of the Society was resumed. Six new members were elected, and papers were read by Dr. George M. Smith, Frederick M. Williams, Esq., Compensation Commissioner, and Dr. Eugene L. Fisk, Director of Hygiene in the Life Extension Institute of New York City.

The following resolution was passed, viz.:

WHEREAS, Salvarsan is a drug which is of vital importance to the protection of health and to the saving of life; and

WHEREAS, the patent rights conferred on Salvarsan and its congeners have created a monopoly which has permitted a price to be placed on the drug which makes it unavailable to tens of thousands of indigent sick in this country; and

WHEREAS, the drug has hitherto been supplied to this country from foreign shores and the supply during the war has been uncertain and insufficient; and

WHEREAS, the patents have prevented the preparation and distribution of the drug in this country by American laboratories; and

WHEREAS, the patents conferred are operating against the health interests and public welfare of this country, therefore be it

Resolved, by the New Haven County Medical Association, that

Congress be earnestly urged to abolish the patents on Salvarsan and its closely related products.

It is moved that copies of this action be sent to the chairmen of the committees on patents of the House and of the Senate and to members of the House and Senate from this State.

I am informed by the Clerk, Dr. Hartshorn, that favorable replies have been received from all those mentioned to whom it was sent.

It is hoped that this matter will be brought up again and acted upon by the whole State Society. As a war measure it will be of incalculable benefit to the whole United States Army to have Salvarsan manufactured in this country, as it can be, at a cost several hundred per cent less than is now charged for it; besides the amount received is very limited, and is only obtained in very roundabout ways. It costs at present about \$4.50 per dose and if manufactured here may be sold at a profit for 50 cents a dose. The product is equally good, in some respects it is said to be better than the original Ehrlich formula.

Three deaths from our number have taken place: Dr. F. N. Elmes of Derby and Drs. Frederick P. Lane and Matthew C. O'Connor of New Haven.

Dr. Francis E. Gessner has joined the regular army but keeps his residence in this city.

One member has been dropped for non-payment of dues.

Dr. C. F. Heady of Milford was transferred to Fairfield County as he lives near the border line.

The Clerk reports as follows, viz.:

On May 1, 1917, number of taxable members	325
Number exempt from taxation	5
<hr/>	
Total membership	330
Amount collected on taxes laid May, 1916	\$885.00
Amount collected on taxes in arrears	109.00
<hr/>	
	\$994.00
Less 10% to county association paid to State Treasurer	99.40
<hr/>	
	\$894.60

Total receipts including balance from last report	\$1,629.53
Expenditures to April 30, 1917, including amount paid Treasurer	1,535.00
Balance in Yale National Bank, April 30, 1917	\$ 94.53
On deposit in Savings Banks	692.67
Total balance April 30, 1917	\$787.20

The State Sanatorium at Undercliff, Meriden, and the Gaylord Farm Sanatorium are keeping on with their good work in caring principally for the incipient cases of tuberculosis in this county; it is expected that the tuberculosis annex to the New Haven Hospital for advanced cases will be ready for occupancy in the coming autumn. The main hospital on Cedar Street is still suffering for want of proper private rooms, but the hospital has no funds available for this purpose. The Hospital of St. Raphael, in this city, the Meriden Hospital and the Griffin Memorial Hospital in Derby are all doing good for the sick of the County.

Respectfully submitted,

WILLIAM H. CARMALT,
Councilor.

(c) New London County, by Dr. Patrick J. Cassidy :

Mr. President and Gentlemen of the House of Delegates:

The membership of the New London County Medical Association was increased to seventy-three during the past year, but this gross membership number has been diminished by the loss of eight members, seven automatically dropped and one, Dr. George D. Stanton of Stonington, one of our oldest members, a practitioner of fifty-two years standing, entered into eternal life.

This past year has been a very successful one financially and scientifically. The semi-annual meeting was a very well attended session and at this meeting very definite action regarding medical advertising was taken after a free and vigorous discussion. The annual meeting, held at the Wm. W. Backus Hospital in Norwich, was the best attended and most enthusiastic meeting that we have had in years. It is very gratifying that this meeting of the oldest medical organization in Connecticut shows such an evidence of renewed activity and interest.

A meeting of all the registered physicians in New London County was called at the order of the National Medical Defense Committee. At this meeting Dr. E. J. McKnight acted as the representative of the national committee, giving a very instructive talk to the assembled men concerning the aim and requirements of the committee. At the close of this talk thirty-four men and one woman signified their intention to act. The meeting then passed a vote instructing the delegates to the various State Medical Associations to vote the adoption of the so-called "Maryland Plan for the Prevention of Punishment of Patriotism."

Respectfully submitted,

P. J. CASSIDY,
Councilor.

(d) Fairfield County, by Dr. Frank W. Stevens:

Mr. President and Gentlemen of the House of Delegates:

The Fairfield County Medical Association has a membership of 212 this year, increasing its membership in the House of Delegates from six to seven.

We have lost three members by death and five have been dropped for non-payment of dues.

We have elected twenty-six new members and have received two by transfer; making a total gain of twenty-eight and a net gain of twenty.

Our Association has held two regular meetings and one special meeting in response to a call from the Committee on National Defense.

This was the largest meeting of the medical men of Fairfield County ever held, about 225 being present. Great enthusiasm was evidenced. The "Maryland Plan" was adopted on a fifty per cent basis, and some seventy-five men pledged themselves to apply for enrollment in the Medical Reserve Corps.

The hospitals throughout the county are doing excellent work. Many are prepared to increase their capacity in event of war or

emergency and training their personnel to handle the increased work should the necessity arise.

The addition of up-to-date laboratories and scientific apparatus shows a marked tendency toward the more scientific study and treatment of disease.

Bridgeport has just issued bonds for the building of a new \$200,000 Hospital for Contagious Diseases and has just built an addition to its present Isolation Hospital for the care of tuberculous patients. Bridgeport is at present signing contracts for a \$200,000 Health and Charities Building which will contain a Public Clinic to be run along the lines of the Massachusetts General Hospital Clinics.

This clinic, besides having the usual medical, surgical and special clinics, will be equipped with a \$7,000 X-Ray division, an emergency hospital with ambulance service, drug, food, chemical and bacteriological laboratories and a lecture room with moving picture arrangements so that the nurses, inspectors and employees of the department as well as the general public may be instructed in public health matters.

Along public health lines preparations are being made to handle a Polio. epidemic, should it occur this summer, without the hysteria and confusion of our past experiences.

Tuberculosis is much neglected and the laws covering the reporting and handling of tuberculosis are known to few if any physicians and are not enforced by the authorities whose sworn duty it is to do so. A study of the records show that at times more deaths have occurred than there were cases reported.

Bridgeport is now running a Tuberculosis Clinic and sending the dangerous cases to its Isolation Hospital, incipient cases to State Sanatoria and arrested cases are being followed up by the Public Welfare nurses and the clinic physicians.

The medical affairs of the county seem to be running smoothly, nothing having been brought to the attention of the Councilor for his official attention.

Respectfully submitted,

FRANK W. STEVENS,

Councilor.

(e) Windham County, by Dr. Robert C. White:

Mr. President and Gentlemen of the House of Delegates:

It is a pleasure for me as Councilor of Windham County to report a most satisfactory degree of harmony among the medical men, whether members of our Association or not. The interest manifest in our society matters is best shown by the large percentage of our membership attending these meetings. During the year an especial effort has been made by our members to interest all eligible physicians within our borders to take membership with us. The result of our campaign has resulted in three new members.

During the winter Dr. J. A. Goucher contracted pneumonia and died. A young man of much natural ability, well qualified by nature and education to have taken an advanced standing in his chosen profession. He was twenty-six years old and a resident of Putnam.

Our present membership is thirty-eight, a gain of two for the year. Society activities have been limited to our usual two meetings. Our semi-annual meeting was held at Danielson, October 19, 1916. A most interesting and instructive paper by Dr. Locke of Hartford on "Some Observations on Infantile Paralysis" was read by Dr. Overlock. At the time of our meeting Dr. Locke was seriously ill with appendicitis and unable to be present. Expressions of sympathy for Dr. Locke and the sincere wish for his speedy recovery were expressed by all present.

The 124th annual meeting of the Association was held at Putnam, April 19. Resolutions favorable to the adoption of the Maryland Plan by the Connecticut State Medical Society for caring for the practice of the members called to the colors were unanimously adopted. The following motion was also carried: "We offer to the United States Government our services individually or as a society during the present war."

The literary programme included a paper by Dr. H. F. Stoll of Hartford on "Some Sociological, Economic, and Medical Aspects of Syphilis." His paper was made doubly interesting and comprehensive by the use of lantern slides. Dr. Stoll needs

no commendation from us for the able manner in which he treated this most important subject. His clinical data is up-to-date, his conclusions logical, and the impressive and convincing manner in which he treats the subject leaves no doubt in the minds of his listeners as to his knowledge or interest in it.

We were honored at this meeting in having with us our State President, Dr. Garlick. He delivered a short address on "Matters concerning the medical profession in the present war."

My report as Councilor for Windham County would be most incomplete if I failed to record the great satisfaction and pleasure in the recovery of one of our members. His condition at the time of our meeting in April, 1916, was considered hopeless. We trust he may be spared to us for many years, the same wise counselor and true friend. I refer, gentlemen, to Dr. S. B. Overlock.

Respectfully submitted,

ROBERT C. WHITE,
Councilor.

(f) Middlesex County, by Dr. George N. Lawson:

Mr. President and Members of the House of Delegates:

There is little to report from Middlesex County. Our physicians have in their quiet and harmonious way been working for the good of their communities and for the advancement of their profession.

The two county meetings were well attended and the papers read were of high character.

The Central Medical Association has held monthly meetings in Middletown with interesting addresses by invited specialists and by its own members.

The pathological laboratory in connection with the Middlesex Hospital efficiently conducted by Dr. Jessie W. Fisher, has proved of the greatest value to the physicians of the county.

In the death of Prof. H. W. Conn, who was cut down in the midst of his usefulness, the county and the State has lost a man whose place it will be hard to fill.

Our physicians have enthusiastically and generously devoted much time to the activities connected with preparedness for the conditions of war, such as conducting first aid classes, examining for the Home Guard and coöperating with the work of the Red Cross. At a recent meeting of all the physicians of the county, twenty-one offered their services to the Government, and it was unanimously voted to support the Maryland Plan of caring for the practice of such as left for work in connection with the war.

Respectfully submitted,

GEORGE N. LAWSON,
Councilor.

(g) Tolland County, by Dr. Thomas F. Rockwell:

Mr. President and Gentlemen of the House of Delegates:

There has been very little change in the membership of the Tolland County Medical Association during the year. The Association has gained one member, Dr. J. W. Dawson of Stafford Springs, and lost one by death, Dr. Frederick Gilnack of Rockville. He graduated from the College of Physicians and Surgeons of New York in the year 1867, and since that date has been in active practice in Rockville and Tolland County until within three years, when he retired from active work on account of ill health. His obituary notice was read before the annual meeting by Dr. E. P. Flint, and will appear in the record of the proceedings of this Society.

The members of the profession have had a very busy winter. The Johnson Memorial Hospital of Stafford Springs, the only hospital in Tolland County, has had a very prosperous year, being filled with patients nearly all of the time.

The semi-annual meeting was held at Stafford Springs, Tuesday, October 17, 1916. The papers of the meeting were "Polio-myelitis in Connecticut," by Dr. John T. Black, Secretary of the State Board of Health, and "Some Professional Observations Respecting 'The Mother of the Family,'" by Dr. Gideon C.

Segur of Hartford. The papers were very interesting and instructive. We were highly honored by the presence of Dr. Garlick, President of the State Society. It is a long trip from Bridgeport to Stafford Springs, and I can assure him that all the members present at the meeting appreciated his coming.

The 125th annual meeting was held in Rockville, Tuesday, April 17, 1917. Professor Winslow of the Yale School of Medicine gave us a very interesting and profitable talk on "The Public Health Problems of Connecticut." Papers were also given by Dr. Orin R. Witter of Hartford on "The Toxaemias of Pregnancy: Their Management with Prognosis for the Mother: Care of the Baby," and by Dr. Isaac P. Fiske of North Coventry on "Treatment of Poliomyelitis."

Respectfully submitted,

THOS. F. ROCKWELL,
Councilor.

(h) Litchfield County, by Dr. Elias Pratt:

Mr. President and Gentlemen of the House of Delegates:

The notable event during the past year in Litchfield County was the opening of the Charlotte Hungerford Memorial Hospital in Torrington. I need not tell you of this hospital for the State Society met with us at our semi-annual meeting last fall, the meeting being held at the hospital.

This meeting was very largely attended and the programme was excellent. There was a most interesting discussion of infantile paralysis. We also had our annual meeting this spring which brought out a goodly number of our members owing to the interest in medical preparedness. Dr. Frank K. Hallock gave an address on this subject and followed it with an appeal for volunteers for the Medical Reserve of the United States Army, which met with a very generous response.

Respectfully submitted,

ELIAS PRATT,
Councilor.

(5) Report of the Treasurer, Dr. Phineas H. Ingalls (Hartford):

REPORT OF THE TREASURER.

P. H. INGALLS, TREASURER, IN ACCOUNT WITH THE CONNECTICUT
STATE MEDICAL SOCIETY.

DEBITS.

1916			
May	17	Balance from old account	\$1,511.49
July	1	From O. C. Smith Fund, advance on bond	11.58
Oct.	23	Laura H. Hills, Windham County	56.70
Nov.	6	W. E. Hartshorn, New Haven County ...	655.00
1917			
Apr.	27	Laura H. Hills, Windham County	37.80
May	2	W. E. Hartshorn, New Haven County ...	239.60
		H. B. Hanchett, Litchfield County \$124.20	
		Less deducted for printing, fall	
		meeting	24.95 99.25
	5	J. H. Kingman, Middlesex County	118.80
		L. F. LaPierre, New London County	199.08
	14	A. R. Keith, Hartford County	650.70
	16	P. W. Bill, Fairfield County	521.10
	18	Eli P. Flint, Tolland County	32.40
			<hr/> \$4,133.50

CREDITS.

1916			
June	9	Everett J. McKnight, Expense account	
		A. M. A.	\$349.19
	21	Rob't C. Knox, Treasurer's Bond 1916-1917	5.00
		Kate C. Mead, Expense account Public	
		Health Com.	12.47
		American Medical Association Directory ..	8.00
		P. H. Ingalls, Postage Stamps	2.00
		Plimpton Mfg. Co., Stationery	3.25
		Tolland Co. Med. Soc., one half Annual	
		Meeting	15.75
		Tuttle, Morehouse & Taylor Co., Printing..	93.22
July	6	Mabel W. Carter, Stenographic Work	110.33
	10	H. Bertram Lambert, Anniversary Chairman	16.50
	18	Hugh M. Alcorn, Legal Services	200.00

1917				
Mar.	21	Rob't C. Knox, Treasurer's Bond 1917-1918	\$ 5.00	
		Underwood Typewriter Co., Repairs	15.00	
		Phoenix Nat. Bank, Safe Deposit Box	5.00	
May	16	Tuttle, Morehouse & Taylor Co., Proceed- ings	1,140.84	
	18	M. M. Scarbrough, Salary and Expenses..	160.69	
		P. H. Ingalls, Salary	25.00	
		Balance to new account	1,966.26	\$4,133.50

THE RUSSELL FUND.

1916			
May	17	Cash in Savings Bank last report	\$535.36
July	1	Coupons Conn. Railway & Lighting Bonds..	112.50
		Coupons Consolidated Railway Bonds	40.00
		Coupons Gas Light Co. Bond	20.00
1917			
Jan.	1	Coupons Conn. Railway & Lighting Bonds..	112.50
		Coupons Consolidated Railway Bonds	40.00
		Coupons Gas Light Co. Bond	20.00
		Interest on deposit	19.61
		Cash in Bank, this report	\$899.97

The Fund consists of:

- 5 \$1,000.00 Mortgage four and one half per cent Bonds, Conn. Railway & Lighting Co.
- 2 \$1,000.00 Debenture four per cent Bonds, The Consolidated Railway Co.
- 1 \$1,000.00 1st Mortgage four per cent Bond, Hartford City Gas Light Co.

THE O. C. SMITH FUND.

		Last report Fund owed State Society	\$11.58	
1916				
July	1	Coupon Gas Light Co. Bond	20.00	
1917				
Jan.	1	Coupon Gas Light Co. Bond	20.00	
		Interest on deposit16	\$40.16
July	1	Paid State Society advance to purchase Bond	11.58	
		Cash in Savings Bank		\$28.58

The Fund consists of :

- 1 \$1,000.00 1st Mortgage four per cent Bond,
Hartford City Gas Light Co.

Respectfully submitted,

P. H. INGALLS,
Treasurer.

HARTFORD, CONN., May 23, 1917.

This is to certify that we have this day examined the accounts of the Treasurer and find the same correct and the securities listed to be in his possession.

T. F. ROCKWELL,
WALTER R. STEINER,
Auditors.

(6) Report of the Committee on Public Policy and Legislation, by Dr. Everett J. McKnight (Hartford):

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION.

Mr. President and Gentlemen of the House of Delegates:

A special meeting of the Committee was held at the Hartford Club on January 20, 1917, six days before the date fixed by the Legislature as the last day for the introduction of new business. This meeting was called to act upon the reports of the special committees appointed by the chairman on March 9, 1916, and mentioned in the report of last year and to consider any other matters which might properly come up for action during the session of 1917.

Dr. Paul Waterman, chairman of the sub-committee on Health Insurance, reported that it was the opinion of the committee that it was not advisable for the state of Connecticut to enact a compulsory health insurance law at the present time. Senate Bill No. 149, concerning Compulsory Health Insurance, introduced by the American Association for Labor Legislation, had several hearings before the Committee on Insurance and was

finally continued until the next session of the General Assembly. This is a matter of great importance and unless there is objection the sub-committee consisting of Drs. Waterman, Foote and Blumer will be continued.

Dr. W. H. Donaldson, chairman of the sub-committee on drug legislation, reported that there was nothing of importance to come up in that line. A communication from Dr. Barnum of Kent enclosing House Bill No. 367 providing for the treatment of narcotic drug addicts in Connecticut Hospitals for the Insane was referred to this committee. This bill was introduced and a substitute bill enacted. This provides that an addict may be committed to the Connecticut Hospital for the Insane at Norwich by the Probate Court. If the patient is found to be suffering from a curable disease or that the drug habit is curable he shall be confined in said hospital until cured. If he is suffering from an incurable disease and requires the administration of any narcotic drug he may be discharged and be given a certificate signed by the superintendent, stating that he is suffering from an incurable disease and requires the administration of a narcotic drug, which certificate shall be filed with a druggist approved by the State Board of Health and such druggist may fill the prescription of any skilled physician for such addict, which prescription may show an increased dosage of such drug.

Drs. Hallock and Tuttle of the sub-committee on new examining boards reported that it was not advisable to urge any modification of the principles underlying the medical practice act but recommended that one year of hospital service be added as a qualification of license and that provisions be made for practical examination of applicants including the requirement of a fee of \$25 instead of \$15.

There was introduced by Representative Healy of Waterbury a bill amending the medical practice act mainly in extending the time for the requirement of an extra nine months course in physics, chemistry and biology. Late in the session the physicians of the Public Health and Safety Committee felt that they would be able to secure the passage of a bill making radical changes in our present act as a substitute to the Healy bill. The matter

was considered at several meetings by a committee consisting of Drs. Hallock, J. C. Rowley, A. E. Austin, E. B. Hooker and E. J. McKnight and a preliminary draft made. On account of the lack of time it was impossible to get the bill into perfect shape and secure its approval by the different interests concerned and it was finally agreed that it should be left in the hands of a committee consisting in so far as the Connecticut State Medical Society is concerned of Drs. Hallock, J. C. Rowley and Austin to report a complete bill to the next annual meeting of the society.

It is proposed that there be appointed by the Governor from a list of names submitted to him by the presidents of Yale, Wesleyan and Trinity, a board of Regents for Medical Licensure, five in number, none of whom shall be physicians. The Board of Regents will appoint a Board of Examiners consisting of nine physicians, the first appointees being taken from the present examining boards, at least one representative of each medical society being a member. The Board of Regents will pass upon the preliminary qualifications of all applicants and will have the power to regulate any new cults which may hereafter arise. The Board of Examiners will examine all applicants to practice medicine, osteopathy and chiropractics in the fundamental branches, the osteopaths and chiropractics to be further examined by committees appointed by the Board of Regents. It is the intention of those interested in the matter to bring dentists, pharmacists, optometrists, chiropodists and midwives under the supervision of the Board of Regents.

A substitute for the Healy bill was passed. The date at which the course of at least nine months duration in chemistry, physics and general biology shall be required was changed from January 1, 1915, to January 1, 1919. It was understood by your chairman that the fee for examination should be changed from \$15 to \$25. It surely was the intention of the Committee on Public Health and Safety to make this change but in some way it was overlooked.

The report of the Committee on Inflammation of the Eyes of the New Born in the form of a proposed bill was adopted. This bill, copied mainly from the Ohio law, was introduced and a

hearing held. It received favorable action by the Committee on Public Health and Safety and as it called for an appropriation was referred to the Appropriation Committee. Not hearing from the bill for several weeks your chairman consulted the chairman of that committee and found it had been referred to the secretary of the State Board of Health to be re-written as objections had been made to the language of the bill. Said secretary of the State Board of Health was requested to confer with Dr. Blake of New Haven who was instrumental in drafting the bill but for some unknown reason it never was reported back from the Appropriation Committee. It is recommended that this matter be left in the hands of this committee with power to introduce it in better form in the next general assembly.

At the request of the committee Dr. Botsford, superintendent of the Hartford Board of Health, appeared before the January meeting of the committee and presented considerations concerning small pox vaccination. A resolution was adopted that the chairman appoint a committee to draw up a bill to introduce into the general assembly providing that parents having conscientious scruples against vaccination might obtain exemption from the requirement of vaccination imposed by local school boards by obtaining a certificate from a magistrate. Drs. Blumer, Botsford and Waterman were appointed on this committee. A bill was introduced and at a hearing the anti-vaccinationists who had their usual bill before the assembly asked for unfavorable action upon their bill if the committee reported favorable upon ours. The bill was reported favorably, passed both houses but was vetoed by the Governor on the last day of the session.

House Bill No. 680, the chiropractic bill, was passed with the addition of a section similar to that in the optometry and chiropody laws prohibiting the use of the title "doctor." It was agreed by all that there was a necessity for some restriction of chiropractors and this bill placed them in the same position with barbers and plumbers without the right to use the title "doctor."

House Bill 961, the natureopathic bill, was rejected.

House Bill 957 prohibits any person engaged in any branch of the art of healing the sick or injured from using the title

"doctor" without specifying the particular practice in which they are engaged unless he has received the degree of Doctor of Medicine, Doctor of Dental Surgery, or Doctor of Osteopathy from an institution legally qualified to confer such a degree.

House Bill 956 concerning the testing and labelling of disinfectants introduced by Dr. Austin of Greenwich was passed. This requires that on the label of all disinfectants for external use there shall be placed the Carbohc Acid Coefficient by Rideal-Walker or Hygienic Laboratory Test. This is the first state in the union to enact such a law.

Several other matters of interest to the profession received favorable action, the most important of which was a substitute for Senate bill 573, creating a State Department of Health to consist of a Commissioner of Health and a Public Health Council with Directors of Bureaus and other officials which, while not by any means what was desired, is an important step toward a satisfactory health organization in the state.

EVERETT J. MCKNIGHT,
Chairman.

(7) Report of the Committee on Medical Examination and Medical Education, by Dr. Charles A. Tuttle (New Haven):

REPORT OF COMMITTEE ON MEDICAL EXAMINATION AND MEDICAL EDUCATION.

Mr. Chairman and Gentlemen of the House of Delegates:

The work of the Medical Examining Board and your committee on Medical Education has been so intertwined during the past year that it seems fitting that the two bodies make a conjoint report.

The Medical Examining Board has examined during the year seventy candidates for certificates of qualification in General Practice, of whom twenty-four, or 29.1 per cent, have failed to meet requirements. There have also been granted certificates to

six under the special privilege amendment passed by the last Legislature. Thus a total of fifty-two possible acquisitions to the practice of regular medicine in Connecticut. Your Committee feels that a list of such successful candidates who are to be our colleagues and possible members of our Society, a copy of our Medical Practice Laws and a set of questions used at one of our examinations would be instructive and useful if published in our Proceedings, but has no disposition to do so if there is the slightest objection from anyone. The records are at hand, however, and may be had by our Committee on Admissions and the many members of our Society who are so constantly asking for them.

The demand for medical men incident to the war has necessitated some changes in the courses and graduation from our medical schools. Letters received from the Secretary of the Navy, the Secretary of War and the Surgeon General have asked that certain credits be allowed senior medical students of Class A colleges who enlist. It is requested that these students be accredited by the Examining Board although they have not completed the full prescribed courses and number of hours in strictly medical studies, and further that the present junior class be allowed to take a continuous course, without the usual summer vacation, beginning July 1, 1917, and being graduated about January 1, 1918. These questions were taken under careful consideration. It was decided that the wisest and safest course was to put the entire matter squarely upon the several faculties of Class A medical colleges, and stating that during the period of the war the Examining Board would accept such students as in the opinion of these faculties were entitled to be graduated and were granted diplomas, and that the Examining Board would for all time recognize diplomas so granted. This attitude has been endorsed by the Secretary of the Navy and by the Surgeon General and has been followed by many of the Eastern States. It is now a fixed rule of the Board. We feel that the spirit of the law and the times has been honestly met.

Your Committee would call your attention to the work of the National Examining Board. This work is worthy of and is

clamoring for recognition at our hands. While one examination, only, has been held, the work and the results of that examination were of such a character as to demand our attention and approval. If this good work continues this Board would feel that a change in our Medical Practice Act should be made which would allow it the privilege of accepting the work of the National Examining Board. At present our law does not permit it.

The Secretary wishes to acknowledge the very valuable assistance of Dr. F. H. Hynes, who has acted as Clerk during the past year.

Respectfully submitted,

CHARLES A. TUTTLE,
Secretary.

(8) Report of the Committee on Scientific Work, by Dr. Wilder Tileston (New Haven):

REPORT OF THE COMMITTEE ON SCIENTIFIC WORK.

Mr. President and Gentlemen of the House of Delegates:

The scientific programme of this year's meeting has been arranged along similar lines to that of last year. When the Society met in New Haven three years ago, the clinical session proved a very attractive part of the programme. Believing that the demonstration of modern clinical and laboratory methods should be one of the functions of a state medical society, we have devoted one morning session to such work.

Last year an address was given by an invited guest, Prof. David L. Edsall of the Harvard Medical School. His valuable "Studies of the Respiration" added much to the interest of the meeting. Following this precedent, we have invited this year Prof. William Sharpe of New York, who will give an address on "Skull Fractures: Their Treatment."

SCIENTIFIC PROGRAMME

WEDNESDAY AFTERNOON, MAY 23, 1917, 2 O'CLOCK.

"Some Problems of State Health Organization."—Dr. Kate C. Mead, Middletown. Discussion: Prof. C.-E. A. Winslow, New Haven (by invitation).

"Treatment of Congenital Club Foot" (Illustrated by lantern slides).—Dr. Ansel G. Cook, Hartford. Discussion: Dr. Joseph F. O'Brien, Hartford.

"Early Diagnosis of General Paresis."—Dr. C. Floyd Haviland, Middletown. Discussion: Dr. Whitfield N. Thompson, Hartford.

"The Differential Diagnosis and Treatment of Some of the Rarer Urological Conditions" (Illustrated by lantern slides).—Dr. Thomas N. Hepburn, Hartford. Discussion: Dr. A. C. Heublein, Hartford; Dr. E. J. McKnight, Hartford.

"The Treatment of Ectopic Gestation based on Results Obtained on the Gynecological Service of the Hartford Hospital."—Dr. Calvin H. Elliott, Hartford. Discussion: Dr. Phineas H. Ingalls, Hartford; Dr. T. Weston Chester, Hartford.

THURSDAY MORNING, MAY 24, 1917, CLINICAL SESSION.

(Special reports of cases presented at the clinics follow the scientific papers.)

9:30 to 10:30 A. M., Laboratory Demonstrations. Clinical Laboratory, Yale Medical School, 321 Cedar Street.

"The Technic of Isolation of Pneumococci from Sputum in Pneumonia, and the Differentiation into Types."—Dr. A. L. O'Shansky, New Haven (by invitation).

Demonstration of Quick Method of Determining the Urea of the Blood.—Dr. J. M. Slemons, New Haven.

Demonstration of Method of Determining the Alveolar CO_2 .—Dr. W. H. Morriss, New Haven.

Demonstration of Syphilis of the Placenta.—Dr. J. M. Slemons, New Haven.

Cystin Crystals in Urinary Sediment.—Dr. C. W. Comfort, New Haven.

Clinics at New Haven Hospital, Cedar Street.

9:30 to 10:30 A. M., Ward Rounds, New Haven Hospital, Isolation Department, Dr. W. Tileston, New Haven; Dr. D. W. Porter, New Haven.
10:30, Medical Cases.—Dr. George Blumer, New Haven.

10:45, Cases from the Women's Clinic.—Dr. J. M. Slemons, New Haven.

11:00, Surgical Cases.—Dr. W. E. Hartshorn, New Haven.

11:15, Neurological Cases.—Dr. Max Mailhouse, New Haven.

11:30, Demonstration of Roentgenological plates.—Dr. J. A. Honeij, New Haven.

11:45, Enlargement of the thymus in children.—Dr. J. I. Linde, New Haven.

Operative Clinics, Grace Hospital, 1418 Chapel Street.

9:00 A. M., Operations on Eye and Throat.—Dr. R. J. Ferguson, New Haven.

10:00 A. M., Thyroidectomy and Presentation of Thyroid Cases.—Dr. W. E. Butler, New Haven; Dr. T. H. Russell, New Haven.

11:00 A. M., Bone Grafting for Fixation of Sacrum.—Dr. E. H. Arnold, New Haven.

Operative Clinic at Hospital of St. Raphael, 1442 Chapel Street.

10:00 A. M. to 1 P. M., General Surgery.—Dr. W. F. Verdi, New Haven; Dr. W. H. Crowe, New Haven.

THURSDAY AFTERNOON, MAY 24, 1917, 2:30 O'CLOCK.

President's Address.—Dr. Samuel M. Garlick, Bridgeport.

3:15, "Skull Fractures, their Treatment."—Dr. William Sharpe, New York City, Adjutant Professor Neurological Surgery, New York Polyclinic Medical School (by invitation), (Illustrated by moving pictures).

3:45, "The Mobilization of the Medical Profession."—Dr. Joseph Marshall Flint, New Haven. (At Dr. Flint's request his remarks are not published. They contained many remarks in regard to the war, which he thought inadvisable to put into print.)

4:30, "The Distribution of Fat in the Appendix and its Relation to Inflammatory Processes."—Dr. George M. Smith, Waterbury. Discussion: Dr. J. M. Flint, New Haven; Dr. A. A. Crane, Waterbury.

Respectfully submitted,

WILDER TILESTON,

Chairman.

(9) Report of the Committee on Honorary Members and Degrees, by Dr. Max Mailhouse (New Haven):

REPORT OF THE COMMITTEE ON HONORARY MEMBERS AND DEGREES.

Mr. President and Gentlemen of the House of Delegates:

The Committee beg leave to report that they have considered the names of Dr. Richard P. Strong of Harvard University, and of Dr. Hermann M. Biggs of New York, nominated as candidates for honorary membership at our last annual meeting, and that we recommend their election.

We further beg leave to report as candidate for honorary membership in our Society the name of Dr. Harvey Cushing of Harvard University and of Cambridge, Mass.

Respectfully submitted,

MAX MAILHOUSE,

Chairman.

(10) Report of the Committee on Arrangements, by Dr. F. N. Sperry (New Haven):

REPORT OF THE COMMITTEE ON ARRANGEMENTS.

Mr. President and Gentlemen of the House of Delegates:

The Entertainment Committee reports that they have arranged for the Scientific Sessions, Meeting of the House of Delegates and Meeting of the Council at Hotel Taft. Also that on Wednesday evening, May 23, at 8:30 P. M. there will be held a smoker and on Thursday at 6:30 P. M. the Annual Dinner. With the exception of the Council all meetings will be held in the Palm Room of the Hotel Taft.

No charge will be made for the smoker; tickets for the annual dinner are for sale by the Committee at \$2.50 each.

Respectfully submitted,

FREDERICK N. SPERRY,

Chairman.

(11) Report of the Committee on a Sanatorium for the Nervous Poor, by Dr. Frank K. Hallock (Cromwell):

REPORT OF THE COMMITTEE ON A SANATORIUM FOR THE NERVOUS POOR.

Mr. President and Gentlemen of the House of Delegates:

Owing to the fact that the General Assembly of 1917 would unquestionably adjust and complete the combination of management of the Epileptic Colony and the Institution for Imbeciles and make adequate appropriation therefor, and also consider the establishment of a Psychopathic Hospital at Middletown, a Reformatory for Women and various other medical projects, it was deemed wise by your committee not to appeal to the Legislature this year for the foundation of a Sanatorium for the Nervous Poor. It appeared that the time was not opportune and the general state of affairs in the Commonwealth not propitious for an attempt to be made to establish a new and somewhat novel institution. Sanatoria for persons of small means, treating a considerable group of individuals not suitable for either general or psychopathic hospitals, would be of inestimable advantage and prove, as has been demonstrated in Europe, of real economic value to the State. Let us hope that two years hence may witness the beginning of an active campaign for an institution of this kind.

Respectfully submitted,

FRANK K. HALLOCK,

Chairman.

(12) Report of the Committee on a State Farm for Inebriates, by Dr. F. H. Barnes (Stamford):

REPORT OF THE COMMITTEE ON A STATE FARM FOR INEBRIATES.

Mr. President and Gentlemen of the House of Delegates:

Your committee on a State Farm for Inebriates was called together by the chairman on Thursday, Dec. 21, 1916. The

meeting was held at the Norwich State Hospital. We were received by the Acting Superintendent, Dr. T. F. Erdman, and Board of Trustees at luncheon and afterward were driven in automobiles to the new State Farm for Inebriates. The institution is well removed from the State Hospital for Insane: is over two miles distant with a small village separating the two. The Gallup or Broadview Farm, a tract of land of one hundred acres on the Norwich and Westerly Railroad, is the site of the new hospital. This was purchased from the Lucas estate at a cost of forty-five hundred dollars, with money appropriated by the General Assembly of 1913 for additional farm land to the Norwich State Hospital. On this land was a house and out-buildings which mainly through the work of the patients has been developed into accommodations for sixty-three inmates, the census on the day of our visit. The farm has a good supply of spring water and is very fertile. A sub-drain sewerage system with septic and discharge tanks has been installed. A central dining room with a capacity for one hundred people is in use. A new building of the two-story dormitory type is needed and will be asked for at this session of the Legislature. Money necessary for remodelling the old buildings and constructing the new will be repaid to the State Hospital which advanced it by employing✓ the inebriate labor in enlarging the Hospital dam and storage reservoir. On Dec. 21, 1916, there were over forty patients in the main hospital who should be in the State Farm buildings.

The whole proposition is in an experimental stage but your committee saw enough to convince them that original and scientific work was being accomplished with little overhead expense to the state. It was surprising to note the good work accom-✓ plished thus far without one dollar specially appropriated to the farm from the State treasury.

Your committee voted it would be very unwise at this time to ask for another State Farm in the western part of the State. We were convinced the Legislature would not act favorably on such a project until they learn more of the work of the present institution. It was also voted to ask our legislative committee to further the work of getting a necessary appropriation for the furtherance of the good work now being done at Norwich.

There is no permanency in the present buildings as they are all frame and we felt the menace of fire would prohibit the growth of too large a unit at this one place. Shops are needed for the industrial work during inclement weather. A central admission building for receiving new cases should be provided. One of the economic features of the establishment is that there is no charge for executive service,—all this is taken care of by the staff of the State Hospital. The supplies are obtained from the same source at cost, a large saving to the State.

We found little to criticize, much to commend. In fact a fine start has been made along the line of taking good care of our inebriate population. Many more things could be said relative to the matter but we must not transgress longer on the time of the House of Delegates which has so many important matters before them.

Respectfully submitted,

F. H. BARNES,

Chairman.

(13) Report of the Committee on Medical Inspection of Schools:

REPORT OF THE COMMITTEE ON MEDICAL INSPECTION OF SCHOOLS.

Mr. President and Gentlemen of the House of Delegates:

Your committee prepared an amendment to the present State law, one intended to simplify its provisions and increase its compulsory features. As the present Act is a part of the School Laws and as Secretary Hine of the State Board of Education had planned a more comprehensive law with the same end in view, it seemed best to our legislative committee to support Secretary Hine's bill with slight modifications. Because of the old disagreement as to whether the authority should be vested with educational or health authorities, this bill lost out in committee.

Our effort was further concentrated on the improvement of our general health state organization. In the final passage of this bill, the Child Hygiene Bureau was eliminated. Our present need is effective education of ourselves and those whom we may reach as to the value of medical inspection and the necessity of more thorough school hygiene.

Respectfully submitted,

EDWARD W. GOODENOUGH,
Chairman.

(14) Report of the Committee on Public Health Education, by Dr. Kate C. Mead (Middletown):

Read by Dr. G. N. Lawson.

REPORT OF THE COMMITTEE ON PUBLIC HEALTH EDUCATION.

Mr. President and Gentlemen of the House of Delegates:

The first meeting of the Public Health Education Committee was held at Torrington, in October, 1916, six members being present. We then decided to take a hasty survey of the rural communities in each county, hoping thereby to accomplish some organized child-welfare work in the small towns and villages.

That the necessity for this work was great no one could deny, but the helpers were found to be few, and after looking through the available material for traveling exhibits and school demonstrations in hygiene we appealed to the Secretary of the State Board of Health for substantial aid and found his organization unable to give us anything more substantial than sympathy owing to lack of funds for public health education. Therefore at a second meeting of this committee in Hartford, in December, it was decided to bend our energies toward obtaining for the Board of Health the legislation it would require in order to begin adequate educational work in our rural districts. We thereupon

sent out a questionnaire as to the condition of the rural schools and the relative number of natives and foreigners in our country districts, also inquiries as to the amount of tuberculosis among the farming people, for it is our farmers who live in houses shut tight in winter and swarming with flies in summer. As for helping the farmer's wife it is difficult to tell where to begin. From the few answers which our questions received it seems that the condition of the population in the Tennessee mountains cannot be much worse than it is in some of our Connecticut so-called farming regions, both as to physical and moral conditions. If one may judge from the statistics of a neighboring State, the mortality in the rural districts is much greater than in the most crowded parts of our cities, and the inefficiency from ill health seems to be correspondingly great. And if we may also judge as to the value of human beings from financial statistics of our own State we find that the Board of Agriculture obtained from the treasury a sum ten times greater than that which was allotted to the State Board of Health. The conclusions are obvious. What the people really want they always succeed in getting; therefore if we want visiting nurses for our rural districts as earnestly as the Farm Bureau wants visiting teachers of domestic science we must work for them. If the physicians of the State Medical Society do not demand health legislation they should not expect the women's clubs or church societies to support visiting nurses or infants' milk stations.

Your committee then felt that its energies should be devoted to pushing the new bills for the extension of the work of the Board of Health, and, incidentally, to add a special bill for providing for a medical overseer of a department of child-welfare. We sent out several hundred copies of the Board of Health bill accompanied by scores of letters to legislators and influential members of our communities, as well as to doctors, urging them to go to the Legislature and to speak in favor of the bill. As a result of this work a very few of us went to the "Hearing" and lifted up our voices in its behalf, but we were as nothing in comparison with the silver-tongued orators hired by the Christian Scientists and Antivaccinationists to oppose the bill. We should

have had two hundred members of the State Society there to show an interest in the welfare of their patients, and to protect the unthinking portion of our Commonwealth from the machinations of misguided and illogical antagonists to the cause of preventive medicine. As Dr. Stanton says, we have got to prove to our legislators that health pays in dollars and cents. Unfortunately, the child-welfare bill was rejected by the 1917 Legislature.

That this medical society is pledged to work for child-welfare is evident when we consider that every county society in the United States is affiliated with the Federal Children's Bureau through the American Medical Association. In our large cities the physicians are living up to this pledge, and they have aided in carrying on child-welfare weeks in twelve cities during the past year; in Ansonia, Bridgeport, Danbury, Derby, Hartford, Middletown, New Haven, Stamford, Stratford, Waterbury, Wethersfield and Willimantic. Recently the experiment has been repeated in Hartford and Bridgeport. But our little neighbor, Rhode Island, during the same time, has held a baby-week in twenty-two places. Dr. Chapin is, therefore, somewhat justified in rating us 0 in child-welfare and prenatal work, as well as in the examination and oversight of midwives, all of our attempts in these directions having thus far been sporadic.

Although our work for preventive medicine has been non-cooperative during the past year, the individual members of the committee have considerable health organization to their credit. Dr. Stanton has given a great deal of time and strength to the Legislature, both in the interest of education and of health. He has also worked for the United States Public Health Service, and has examined recruits for the Coast Guard, while not neglecting the child-welfare work in which he takes unfailing interest. Dr. Sherman has raised the medical inspection of school children to a high standard in Bridgeport. Her "Day Health Rules" for school children is being used in many other towns. She has given numerous lectures on food and hygiene, and has established clinics for children in the eye, ear, throat, nose, and dental departments of the hospital. Dr. Taylor has given five lectures

on health topics in Hartford. She has also aided in legislative work, and has devoted her remaining spare time to the Social Hygiene and Venereal Disease clinic. Dr. Jessie Fisher has aimed at obtaining medico-psychological inspection of school children in Middletown, with the hope of segregating the mentally dull or deficient from the brighter children. When this object can be accomplished both the children and the city will be gainers. The work in New Haven County speaks for itself; much has been accomplished during the past year, but Waterbury's epidemic of small pox shows a weak spot somewhere in its medical team work. In Tolland County there is another weak spot, for Dr. Rockwell reports three medical inspectors of schools and many infringements of the laws for vaccination of the children. In Litchfield County, owing to the zeal of Dr. Skiff, the usual amount of rural visiting nursing has been accomplished. A report of his work would be well worth while. No report has come from Windham County as yet.

It will be seen from this résumé that very few of our physicians are interested in preventive medicine. Perhaps when our medical schools shall all give courses in public health the tables may be turned and doctors paid for keeping their patients well. Then there will be no more necessity for a committee of Public Health Education than there now is for a committee to urge doctors into surgery.

Respectfully submitted,

KATE C. MEAD,
Chairman.

(15) Report of the Delegates to the American Medical Association, by Dr. D. Chester Brown (Danbury):

REPORT OF DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION.

Mr. President and Gentlemen of the House of Delegates:

The meeting of the American Medical Association at Detroit demonstrated a fact regarding the meeting places for the Asso-

ciation that has often been brought up and in this instance was disregarded, namely, that only large centers or those with unusual hotel facilities and meeting places can accommodate so large an association. The hotels at Detroit were over-crowded and the hotel managers took advantage of this to be very independent and disagreeable. Had it not been for the very capable Committee of Arrangements this would have been much more embarrassing than it was. It became necessary to obtain the use of house boats to meet the demands for quarters. In many hotels guests were put up in corridors and a number in a room and were glad of any place to sleep. The whole-souled hospitality of the local profession could not hide the fact that it was too much of a gathering for Detroit, in her rapid growth and great demands on her hotels, to accommodate. The slogan with which the Committee of Arrangements met their guests was that "Nobody walks in Detroit." And they valiantly made the attempt to prove it by having autos at almost every curb with "A. M. A." banners and an invitation to get in and ride. Traffic laws were largely suspended and on inquiry as to the speed limit the reply was "Don't hit anybody and don't get hit." A great feature was made of the fact that doctors are users of automobiles, and busses were at all the large hotels to organize parties to go through the important factories with guides to show the manufacture of the machines that the profession has come to rely so much upon.

The scientific programmes of the various sections seemed to be well up to standard for variety and excellence in material and writers. The value of a symposium that embraces two sections was again demonstrated when the sections on medicine, surgery, general and abdominal, and the section on obstetrics, gynecology, and abdominal surgery, met and discussed the spleen. This was the most impressive feature of the programme and these papers brought together and published in the proceedings of the various sections give a scope to the subject that is not elsewhere attained. Both the section on dermatology and that on hygiene arranged portions of their programmes in symposia and such grouping is evidently impressing those who have charge of the programmes as a means of grouping subjects and focusing attention on the section.

The scientific exhibit continued to make good its claim of being a marked feature of the meeting of the Association. Frank B. Wynn, who has done so much toward the development of this branch of the work, having completed seventeen years of service, insisted on being released. At this time he bespoke an honorarium of \$1,000 to \$1,500 for his successor; which brings to our notice that these exhibits do not spring into existence fully formed, but are the result of painstaking labor and with a real desire to present something of value to the general practitioner. In fact, it is stated that they are not for the laboratory specialist but the aim is to appeal to the man who wishes to come in closer touch with the newer ideas in his profession. Too often this exhibit is thought of as an adjunct to baby foods, books and instrument exhibits.

The Presidential address to the House was of peculiar gravity when Dr. Vander Veer spoke of the losses that the Association had sustained during the year. It was peculiarly fitting that the work of Dr. Rodman should live after him in the organization of a National Board of Medical Examiners. It is thought that a certificate from this Board that would be accepted by any licensing board would be of value and that many would avail themselves of it. Organized with the surgeons general of the government services and the foremost medical educators of the country; financed by the Carnegie Foundation for several years, it has received the recommendation of the Council on Education after it had made it known that its requirements would be such as to meet those of any State.

There were two amendments to the constitution that are of interest. First, that "The House of Delegates shall meet annually on the Monday preceding the opening of and at the same place as the Scientific Assembly of the Association." The other created the office of Chairman of the House, who should be elected for one year.

The report of the Sub-Committee on Social Insurance was one of the most exhaustive studies ever presented to the House. As that report has been published in form for general study and as we have a special committee upon the subject it is unnecessary to take the matter up in any detail.

The Board of Trustees of the American Medical Association is elected by the House of Delegates. Three are elected each year to serve for three years. The only representation the East had on the Board was Dr. Councilman of Boston and Dr. Marvil of Atlantic City. The three whose terms expired in 1916 were from Denver, St. Louis and Shreveport, La. The Trustee from the latter place was reëlected to succeed himself. A Trustee from Lincoln, Neb., was elected to succeed the one from Denver. That left one place to be filled and the section from which this Trustee should be selected refused to put up a man whom some of us thought would be suitable. Texas, Missouri and Virginia had men in the field. New York, Pennsylvania and Kentucky wanted representation on the Board. Connecticut had absolutely no claim on it. It was a most graceful compliment to sterling worth—an evidence of the appreciation of a man standing always for what he thought was right, that these states with claims relinquished them and elected Everett J. McKnight of Hartford, Conn., to the Board of Trustees.

D. CHESTER BROWN.

(16) Report of the Committee on Hospitals, by Dr. Philip W. Bill (Bridgeport):

REPORT OF THE COMMITTEE ON HOSPITALS.

Mr. President and Gentlemen of the House of Delegates:

On May 2, 1917, I received a note from the Secretary of the State Society, informing me that I was Chairman of the Committee on Hospitals; this was the first I knew of the matter. A week later the President of the State Society dropped me a line stating that he would like a report from the Committee on Hospitals. The scant time left made it impracticable to have a meeting of the committee so the chairman assumes the responsibility of this report.

A set of questions was sent to the superintendents of twenty-five hospitals in the State; replies were received from twenty-one.

The questions were:—

1. How many patients can you care for under ordinary conditions?
2. How many patients could you care for in an emergency?
3. What preparation have you made or have under way for the receiving and care of a suddenly increased number of patients?
4. Could you take care of 25% more patients than you have now on 24 hours notice?

Of these No. 3 furnishes the most interesting answers as tending to show just how seriously the hospital authorities consider the possibility of having to cope with a more or less severe emergency. Fourteen of the twenty-one answers were either flatly "none" or such modifications as "cots to put up," "a stock of beds and clothing," "Emergency lectures," "our building and equipment is taxed to the utmost to do our work, we have tried vainly to get an appropriation from the State for a larger building."

Seven report a business-like attempt to be made. The Hartford Hospital heads the list. The details of this work can be had from the article by Dr. L. A. Sexton, Superintendent, and read before the Connecticut State Nurses' Association at Hartford, May 16, 1917. Dr. Sexton deserves much credit for his endeavors. The other hospitals in this group are to be congratulated on their preparations. It may be of interest to report an outline of what has been done at the Bridgeport Hospital, Mr. W. W. Jones, Superintendent:

A roof garden on top of one of the highest hospital buildings has been roofed and sided in, and is equipped with forty beds; these with twenty beds in another ward which will not be occupied until needed will take care of sixty new patients at a moment's notice.

The staff has been divided into four units, two surgical, one orthopedic, one eyes and face. Each unit consists of: one surgeon, two assistant surgeons, one physician, one anaesthetist, five nurses, and has been assigned operating room and ward.

The treatment of wounds has been standardized so that all use the same method. Dressing trays are set up the same way in each ward, each tray being precisely similar as regards contents and arrangement. This all tends to greatly diminish confusion and repetition.

While we do not expect an invasion nor active fighting we must remember that nearly every city in Connecticut is directly or indirectly manufacturing war munitions, and the possibility of explosions, riots, etc., is not so remote as some seem to think.

Respectfully submitted,

PHILIP W. BILL,
Chairman.

(17) Report of the Committee on Industrial Insurance, by Dr. Paul Waterman (Hartford):

REPORT OF THE COMMITTEE ON INDUSTRIAL INSURANCE.

Mr. President and Gentlemen of the House of Delegates:

The Committee on Industrial Insurance appointed by the Committee on Public Policy and Legislation was unable to carry out in full the duties laid upon it by the Connecticut State Medical Society at its 1916 meeting, on account of the absence of the Chairman of the Committee from the State during the summer and autumn of 1916. Because of this the subject of Industrial Insurance, and particularly of Compulsory Health Insurance, was not adequately considered at the autumn meetings of the County Societies and the opinion of the constituent members of the Society on this subject was not fully obtained.

In accordance with advice which the Society had received, a bill was presented at the recent session of the General Assembly, providing for Compulsory Health Insurance. Two hearings were held on this bill before the Committee on Insurance of the

General Assembly at which its passage was earnestly advocated by its proponents, the American Association for Labor Legislation, and by representatives of local labor organizations. Opposition to its immediate passage was offered by representatives of the manufacturers of the State. Several of the local medical societies in the State sent representation to these hearings, of which the general tone was in favor of the principle embodied in the bill, with recommendation for further consideration before its passage.

Your Committee was represented at these hearings, and lacking specific instructions from the Society, as well as an accurate knowledge of the attitude of the individual members of the Society, your Committee decided that it was proper to state that the underlying principle met with hearty support in the medical profession and that the physicians of the State would do their utmost to fulfill their part in case the General Assembly decided to pass the bill, but that such a measure would modify the social machinery to such an extent that it ought to receive thorough consideration before being put into effect, in order that its execution might be thoroughly practicable.

The Committee on Insurance of the General Assembly believed that all interests involved would agree upon further study of this measure, and on the recommendation of the Committee on Insurance the General Assembly referred the bill to a commission for study to report to the next session of the General Assembly. To the same commission was also referred another bill before the General Assembly which included Compulsory Health Insurance with other extensive provisions for public welfare. The personnel of this commission has not yet been published.

Respectfully submitted,

PAUL WATERMAN,

Chairman.

(18) Report of the Committee on the President's Report, by Dr. C. J. Bartlett (New Haven) :

REPORT OF THE COMMITTEE ON THE PRESIDENT'S REPORT.

Mr. President and Gentlemen of the House of Delegates:

The committee appointed to consider the recommendations made in the President's report begs leave to report as follows:

The President commends for consideration the proposition to have the reports of the delegates to the various State Societies made in open meeting of the whole Society as he feels that they would benefit the whole body of members, and that this method would react advantageously upon the delegates themselves. Your committee favors adoption of this recommendation.

The President also feels that at each annual convention of this Society there should be one or two general meetings of the whole Society "when matters pertaining to subjects of general character or having wide interest to physicians of the State can be presented or discussed in committee of the whole." We recommend that the committee on scientific work, in arranging the programme for each meeting, be instructed to confer with the President of this Society and with the chairman of the council and to include in the programme, for general discussion, any matters which appear to them to be of sufficient interest and importance; and further, that the House of Delegates likewise be empowered to refer any such topics to a general meeting of the members.

The recommendation that steps be taken looking towards earlier publication of the Proceedings has already been met by a vote passed by the House of Delegates.

The President refers to the importance of considering "the proposed financial relations of our members to the practice and care of patients left by physicians called to the service of the nation." Your committee recommends that in carrying out this suggestion, this Society adopt the so-called Maryland Plan, determining the per cent basis which shall obtain throughout this State; and that the Secretary be instructed to notify every physician in the State of this action.

The President refers to a letter received by him from the President of the Allied Temperance Forces in this State, and submits a copy of resolutions which they desire to have endorsed by this body. We recommend that these resolutions be presented to this meeting for such action as is deemed advisable.

The President also submits a letter from the Vice Chairman of the United States Employees' Compensation Commission asking the coöperation of this Society and a statement of opinion on certain matters pertaining thereto. We feel that this body is not in a position to take action upon this without further consideration and recommend that it be referred to the Committee on Public Policy and Legislation.

Respectfully submitted,

C. J. BARTLETT,

Chairman.

(19) Report of the Committee on Medical Defense, by Dr. William R. Miller (Southington):

Read by Dr. F. H. Wheeler.

REPORT OF THE COMMITTEE ON MEDICAL DEFENSE.

Mr. President and Gentlemen of the House of Delegates:

Dr. Miller, chairman of the committee, was unable to be present on account of sickness and a short time ago I was requested to make the report for the committee. The committee have had several meetings for the purpose of formulating some plan to be presented to this body to-day for action, but in view of the generally upset condition of the country and the effect which it is bound to have upon the medical profession, which will be more or less serious, and also in view of the fact that most of the county societies have made arrangements with insurance companies whereby their members may be protected at a minimum

cost, your committee deem it inadvisable to take any further action on this subject at the present time.

WILLIAM R. MILLER,
Chairman.

It was voted that a committee be appointed to consider the recommendations made by the President in his report, this committee to report at a later meeting of the House of Delegates.

The President appointed Drs. C. J. Bartlett, A. B. Coleburn, and W. H. Donaldson.

It was voted that the Council and the Secretary should appoint delegates to the various State Societies at their convenience.

On the motion of Dr. Carmalt the resolution of the New Haven County Medical Association in regard to Salvarsan was referred to the meeting of the full Society for action.

Dr. Ingalls pointed out the unsatisfactory way in which the annual reports of the county treasurers are received, and moved that the proposed amendment to Chapter XII, Section 10, of the By-Laws be amended to read as follows:

CHAPTER XII, SECTION 10. The fiscal year of the Society shall terminate on April 30 of each year.

On or before May 10 of each year the Secretary of each component Association shall make a report to the Treasurer of the Society on a blank provided by the Treasurer for that purpose, stating 1st, the number of members from his county and the number exempt; 2d, the total amount collected on the tax of that fiscal year; the amount collected during the year on taxes in arrears; the amount of taxes still in arrears for one year previous; the amount in arrears for two years previous, together with a check to cover the above mentioned collections.

The bills for the tax laid at the annual meeting shall be sent to each member by the respective county clerk on the first day of June of each year.

The clerk of each component association shall forward its roster of officers and list of non-affiliated physicians to the Secretary and Treasurer of this Society each year within five days after the annual session of his county association.

This motion was carried and the amendment as amended by Dr. Ingalls was also adopted.

It was voted that the matter of registration of physicians moving from one town to another be referred to the Committee on Public Policy and Legislation as the enforcement of such registration requires a change in the State law.

Dr. Richard P. Strong of Harvard University and Dr. Hermann M. Biggs of New York were elected honorary members of the Society.

On motion of Dr. Ingalls the Committee of Publication were directed to publish the Constitution and By-Laws, revised to the date of publication, in the annual proceedings each year.

Dr. Crane moved that the Committee on Publication be directed to have the material for the annual proceedings ready for final printing within thirty days after the annual meeting; that the printer be under contract to publish and deliver the report within thirty days thereafter; and that any material which cannot be ready within that time be omitted from the publication, and that if a considerable proportion of the material is unavailable the entire publication be omitted.

Dr. Bartlett moved that Dr. Crane's motion be amended to allow sixty days for the preparation of material for the proceedings. This amendment was accepted by Dr. Crane and after considerable discussion by Drs. Crane, Bartlett, and Steiner, the motion was passed, reading as follows: "I move that the Publication Committee be directed to have the material for the annual proceedings ready for final printing within sixty days after this annual meeting; that the printer be under contract to publish and deliver the report to each member within thirty days thereafter; that any material which cannot be ready within that time be omitted from the publication and that if a considerable proportion of the material is thereby unavailable the entire publication be omitted."

The meeting was then adjourned to Thursday, May 24, 1917, at 8:30 A. M. ■

The second meeting of the House of Delegates was held at the Hotel Taft, New Haven, on Thursday, May 24, 1917, at 9:49 A. M. The following were present: President Samuel M. Gar-

lick and Secretary M. Scarbrough. Council: W. R. Steiner, Hartford County; Wm. H. Carmalt, New Haven County; Frank W. Stevens, Fairfield County; Robert C. White, Windham County; Elias Pratt, Litchfield County; George N. Lawson, Middlesex County. House of Delegates: E. J. McKnight, Hartford County; J. E. Lane, C. J. Bartlett, A. A. Crane, F. N. Loomis and E. W. Smith, New Haven County; F. H. Barnes, F. I. Nettleton, J. D. Gold, G. E. Ober and W. H. Donaldson, Fairfield County; G. M. Burroughs, Windham County; F. H. Lee, Litchfield County; A. B. Coleburn and F. K. Hallock, Middlesex County.

THE PRESIDENT: The first business this morning is the election of officers for the coming year. What is your pleasure?

DR. CARMALT: Mr. President, before that motion is put I want, as chairman of the Council, to make an explanation. According to our laws in Chapter V, Section 4, a sentence reads as follows: "No delegate shall be eligible to any office named in the preceding section except that of Councilor." The meeting of the Council was held the next day after the meeting of the New Haven County Society and no notification was received by the Council as to who the delegates were from New Haven County. We nominated for secretary a man in every respect eligible and desirable for the purpose of secretary. The present secretary had declined previously to have his name mentioned for reelection and we nominated Dr. Lane. Now it turned out that Dr. Lane is a delegate to the present meeting. As a matter of parliamentary law anything can be done by unanimous consent. I move, sir, that section of the by-law just read be suspended for the present meeting, that that by-law be suspended. A single objection, sir, will stop it, but a unanimous vote will do it.

DR. WHITE: I second the motion.

THE PRESIDENT: You hear the motion, gentlemen, on the question of the suspension of the by-law. A permissible proposition, and not a part of the constitution. Is it seconded?

DR. WHITE: I second the motion.

THE PRESIDENT: Moved and seconded that the section of the by-law in Chapter V, Section 4, of the by-laws "And no delegate

shall be eligible to any office named in the preceding section" and so forth, "except that of a Councilor," be suspended in this particular, in relation as to Dr. Lane. Are you ready for the question? Will you discuss it? A single objection will prevent it passing. Those in favor of it will signify by saying aye. Contrary minds? The vote was unanimous. It is so ordered. We are now ready to proceed with the election of officers.

DR. CARMALT: I move the whole list be read first, sir.

THE PRESIDENT: The secretary will read the list of officers nominated.

(List read by the secretary as follows):

President—Dr. Edward K. Root, Hartford.

Vice-Presidents—Dr. Patrick Cassidy, Norwich, and Dr. Charles C. Godfrey, Bridgeport.

Secretary—Dr. John E. Lane, New Haven.

Treasurer—Dr. Phineas H. Ingalls, Hartford.

Committee on Scientific Work—Dr. Ernest A. Wells, Hartford, and Dr. Eli B. Ives, Bridgeport.

Committee on Medical Examinations and Medical Education—Dr. Seldom B. Overlock.

Committee on Public Policy and Legislation—Dr. E. J. McKnight, Hartford County; Dr. Charles J. Foote, New Haven County; Dr. C. C. Gildersleeve, New London County; Dr. W. H. Donaldson, Fairfield County; Dr. C. E. Simonds, Windham County; Dr. R. S. Goodwin, Litchfield County; Dr. F. K. Hallock, Middlesex County; and Dr. Eli P. Flint, Tolland County.

Committee on Honorary Members and Degrees—Dr. Samuel M. Garlick, Dr. Max Mailhouse and Dr. F. K. Hallock.

Delegate to American Medical Association—Dr. Edward T. Bradstreet, Meriden.

Delegates to other States—Maine, F. M. Tukey and P. H. Ingalls; New Hampshire, Dr. Samuel M. Garlick; Vermont, Dr. C. J. Bartlett; Massachusetts, Dr. George M. Burroughs; Rhode Island, Dr. Patrick Cassidy; New York, Dr. Fritz C. Hyde; Pennsylvania, Dr. F. H. Barnes.

All the above officers as nominated were elected by ballot.

On motion of Dr. Steiner it was voted that the next annual meeting be held in Hartford on the third Wednesday and Thursday of May, 1918.

It was voted that the dues for the coming year be three dollars.

It was voted to accept the invitation of the Windham County Medical Association to hold the semi-annual meeting of the State Society in connection with the meeting of that Association.

It was voted to discontinue the Committee on Public Health Education and the Committee on Registration.

It was voted to continue for another year the other special committees.

It was voted that the proposed amendment regarding Medical Defence which was printed on page 58 of the Proceedings of 1916 be laid on the table.

It was voted to adopt the so-called Maryland Plan of providing for the members of the Society called to the service of the nation.

This resolution was discussed at length by Drs. Bartlett, F. H. Barnes, White, McKnight, Donaldson, and Pratt.

The resolution is as follows:

1. *Resolved*, That the Connecticut State Medical Society recognizes the patriotism of those members of the medical profession resident in Connecticut who volunteer for the service of the U. S. Government, and in appreciation of this we recommend that should these members of the profession be called into active service, the doctors who shall attend their patients should turn over one third of the fees collected from such patients to the physician in active service or to his family.

2. *Resolved*, That the secretary of the society shall have prepared letter blanks according to the form attached, to a number sufficient to supply those physicians who are called into active service, with a sufficient number so that they can send a filled-out form letter to each patient, a carbon copy going to the doctor who has agreed to look after the physician's practice, and a second carbon copy to be sent to the secretary of the state society.

The secretary of the state society is instructed to file the carbon copies received by him, and on notification by a physician that he has terminated his service with the government and has resumed his practice, the secretary of the state society shall then send out to each of the patients of this

physician whose names and addresses he has received in the filed letters a letter stating that the physician has resumed the practice of medicine, and requesting the patient in the name of the society to recognize the physician's patriotism by summoning him should he be in need of medical attention.

3. The secretary of the state society is further instructed to have printed and sent to each member of the profession resident and licensed in the State, the card entitled "Agreement," and on return of such signed card to him, to file it.

Below is a specimen of the form letter and the card:

THE CONNECTICUT STATE MEDICAL SOCIETY.

Special Committee on the Application of the "Maryland Plan."

D. CHESTER BROWN, M.D., *Chairman*, JOHN E. LANE, M.D., *Secretary*,
DANBURY. 59 COLLEGE ST., NEW HAVEN.

M—————

Street—————

Postoffice—————

Dear M————: As a member of the Reserve Corps of the United States Army (Navy), I have been ordered into active service by the Government, and on that account I am writing to you of this fact, so that, in case of illness, you may summon some other doctor to attend you. In my absence Dr. ——— of ———. Telephone No. ———, has kindly consented to attend my patients, and I can heartily recommend him.

Sincerely,

—————

Date

.....M.D.

.....Street

.....City

This letter is addressed to the physician who will take charge of my patients, but it in no way restricts you from selecting your own physician. Please present it to any physician you may consult.

Resolved, That the Connecticut State Medical Society recognizes the patriotism of those members of the medical profession resident in Connecticut who volunteer for the service of the U. S. Government, and in appreciation of this we recommend that should these members of the

profession be called into active service, the doctors who shall attend their patients should turn over one-third of the fees collected from such patients to the physician in active service or to his family.

THE CONNECTICUT STATE MEDICAL SOCIETY.

Special Committee on the Application of the "Maryland Plan."

D. CHESTER BROWN, M.D., *Chairman*, JOHN E. LANE, M.D., *Secretary*,
DANBURY. 59 COLLEGE ST., NEW HAVEN.

AGREEMENT TO RESOLUTIONS ADOPTED BY THE CONNECTICUT STATE MEDICAL SOCIETY.

I agree to abide by the resolution adopted by the Connecticut State Medical Society at the annual meeting of 1917, in relation to fees, and to keep such books as will readily show collection of such fees. I further agree to ask every patient whom I have not previously treated, the name of his usual or last medical attendant and if such doctor is in the active service of his Government, to turn over monthly or quarterly to such physician, or his family if he so directs, one-third of the fees collected by me from this patient.

I further agree that when patients are referred to me by a physician or person who has not heretofore referred patients to me, to find out from such physicians or person to whom, in the immediate past, they have usually referred their patients requiring the special services I can render, and if such physician is in the active service of his country, to turn over to him one-third of the fee collected from such patient. This paragraph shall likewise apply to consultations.

I further agree not to attend any patients referred to above, for a period of one year following the resumption of active practice by the physician who has been in active service.

In the remote chance of misunderstandings or disagreements arising under this resolution, I agree to submit the facts to the Board of Censors of the County Society and abide by their decision.

(signed)

Date

.....M.D.
.....Street
.....City

Please sign and mail to

JOHN E. LANE, M.D.,
Secretary Connecticut State Medical Society,
59 College St., New Haven.

On motion of Dr. Crane it was voted that a committee consisting of Dr. D. Chester Brown and the Secretary be instructed to send out cards to all the physicians of the State asking them to pledge their adherence to the Maryland Plan of turning over to physicians in the service of the nation one-third of the gross receipts received from their patients.

Dr. Lane proposed the following amendment to the by-laws: that Chapter XIII, Section 2, be amended to read as follows: "All papers read before the Society or any of the Sections shall become its property. Each paper shall be deposited with the secretary before reading. No paper shall be read before this Society which has been previously published or read before any other organization."

After considerable discussion by Drs. Bartlett, Loomis, Pratt and F. H. Barnes, the following resolution, introduced by Drs. Hallock and Haviland, was passed:

WHEREAS the use of alcoholic liquors is generally recognized as an important factor in the spread of venereal diseases in the army and navy, and

WHEREAS these diseases are among the most serious and disabling ones to which soldiers and sailors are liable, and

WHEREAS the commanding officers of our army and navy have concluded that the use of alcohol impairs the efficiency of their respective services, and

WHEREAS the use of alcohol seriously impairs industrial efficiency in factories and on the farms, without the products of which national defense is impossible, and

WHEREAS there now exists an alarming shortage in our food reserves at a time when we must supply not only our own needs, but also assist in supplying those of the Allies, and

WHEREAS enormous quantities of food materials are now diverted to the manufacture of alcohol in beverages, therefore be it

Resolved, that the Connecticut State Medical Society endorse the movement for the prohibition of alcoholic beverages at the present time, and urge the President and Congress to suppress the manufacture, importation and sale of intoxicating liquors for the duration of the war, and for at least one year thereafter.

Dr. Edward T. Bradstreet was elected delegate to the American Medical Association for the present year to complete the unexpired term of Dr. McKnight.

The House of Delegates then adjourned sine die at 10:21 A. M.

Business Transacted in the Scientific Session.

FIRST SCIENTIFIC SESSION.

WEDNESDAY, MAY 23D, 1917, 2:25 P. M.

THE PRESIDENT: We are happy in having with us to-day delegates from other state societies. I will first call upon and introduce to you Dr. Rowe of New Hampshire. Dr. Rowe, gentlemen.

DR. ROWE: *Gentlemen and ladies:* I am very happy to be with you to-day. Making a speech is something I never could do. I have no special word of greeting to bring from the New Hampshire Society, but I assure you I am pleased to be here with you to-day. (Applause.)

THE PRESIDENT: We can assure Dr. Rowe that we are very pleased to have a delegate and a representative from New Hampshire here. We are delighted to make welcome any representative from neighboring states. Is there another representative here? Maine, New Hampshire, Vermont, Massachusetts?

DR. JACOBS (of Massachusetts): I am in the same position as Dr. Rowe. I have nothing to say. I am glad to be here.

THE PRESIDENT: We will next listen to the report of visiting delegates, those whom we sent abroad. From Maine? From New Hampshire? I know that our delegate went to New Hampshire. Vermont? Massachusetts?

DR. BURROUGHS: Mr. President, I attended the Rhode Island meeting. I had no idea I was connected with the court, but I had to go a year before and attend the Massachusetts meeting and I did make up a little report and none was called for, so I supposed I was to make no report at all this year.

But I went to the annual meeting on the first of June in Rhode Island. It was held in Providence. They had a one-session meeting beginning at four o'clock in the afternoon and their whole meeting winds up with a banquet in the evening. They had a talk by one of their members which was very interesting, and another talk by an attorney for the Massachusetts State Society, but the principal paper of the meeting was to have

been by Flexner, but Flexner was unable to be there so he sent Dr. Allen who gave us a very interesting talk on the treatment of diabetes, well worth going to hear. The banquet was quite a success and I had a very good time.

I think I might add that it is an important thing that we get reports from delegates to these meetings because I think we ought to know what our sister states are doing. I know in Massachusetts year before last I had a very good time and there were several things there that I liked very much. In the first place they had clinics in the hospitals and these clinics were to illustrate the subjects that were to be brought up in the meeting, subjects of the papers, which I thought was a very good idea. Another thing was their banquet. They had a very large crowd at the banquet at the Copley Plaza, very good banquet, and there are two reasons why they have a big crowd there. In the first place the banquet tickets are only a dollar and in the second place they print on their programme "No dress suits." They had splendid speakers and a splendid banquet.

THE PRESIDENT: The delegate to New York? Dr. Pierson of Stamford or Brooks of Greenwich? New Jersey? Maher? Kimball of Norwalk? Pennsylvania? McKnight of Hartford or Carmalt of New Haven?

DR. MCKNIGHT: *Mr. President and gentlemen:* I was late as usual. Dr. Carmalt was there during the whole session. It was a fine meeting, the third one I have been to at the Pennsylvania Society. I remember the second time when the meeting was at Scranton before. As I was introduced the president said I was on my annual pilgrimage to the Pennsylvania State Society. If any one wants a good time and wants to hear some good papers, they want to go to the Pennsylvania State Society. I see you didn't appoint any one this year. I am in line.

DR. CARMALT: Mr. President, I am quite in the situation you are yourself, being a native of Pennsylvania as you are of New Hampshire. When I heard that the Society was to meet in Scranton I felt that I should go, where I could go back to the scenes of my childhood. I knew Scranton long before it was Scranton; when it was simply a cross-roads of Slocum Hollow,

and the ride over the Pocono Mountains which my mother and I used to take, I sitting on her lap. I was about two years old then and it took more days than it takes hours now to go on the train. The contrast was very marked. So much for the personal matter.

The meeting itself was very good. Dr. McKnight didn't mention what I think should be, that we were the guests of an old Connecticut family, Dr. Wainwright, whose father was formerly president of this Society. Wainwright is now the chief of the Moses Taylor Hospital in Scranton, and we were his guests during the time we were there. That of course counted for a great deal in the way of having a good time. The entertainments were all good, the papers were good, Dr. Harris of Johnstown wrote a good paper as the president's address. It isn't worth while to run over the list of names, but there were many very good papers, one by Dr. Wainwright himself, and it was excellent. There was another one by Dr. Yeager on the Criminal Epileptic, in which the opportunity was presented to me to say that in Connecticut we have a law with regard to the—well I may say the propagation of criminals and epileptics in general. As you know, the law forbids the marriage of epileptics to each other, and to the feeble minded; and I was able to give that to them as a note of progress, if they wanted it, from Connecticut to Pennsylvania. I was obliged, however, to follow it up by saying that the law has not been observed.

THE PRESIDENT: We have two illustrations of the desirability of the delegates attending to their duties; the one who did not expect to be called upon to report, and the others who had the satisfaction of reporting. Are there any other reports? Any other delegates? If not we will proceed with the scientific programme.

SECOND SESSION.

THURSDAY, MAY 24, 1917.

DR. CARMALT (New Haven): I beg with your permission, sir, to call up the resolution that was adopted by the House of Dele-

gates yesterday in regard to Salvarsan and ordered to be read before this body, to have it read again, if you please.

THE PRESIDENT: You hear Dr. Carmalt's remark.

(The Secretary read the resolution regarding Salvarsan which will be found in full in the Report of the Councilor of New Haven County in the proceedings of the House of Delegates.)

DR. CARMALT (New Haven): I beg to substitute in the resolution "The Connecticut State Medical Society" for "The New Haven Medical Association," the point being that we wish to have this go to the representatives in Congress and the Committees on Patents in the House of Representatives and in the Senate with the endorsement of the whole Connecticut Medical Society. I think it is quite important that action should be taken at the present time as the matter is now before the Committee. It is of great importance to the United States Army that the patents on Salvarsan be abrogated and the profession allowed the use of Salvarsan which is manufactured in this country as well and perhaps better than it is there.

THE PRESIDENT: I understand that Dr. Carmalt's motion is that this resolution shall be adopted with the change from the "New Haven Medical Association" to the "Connecticut State Medical Society" and that any further action as implied in the motion be carried out.

This motion was seconded and unanimously carried.

DR. CARMALT: I now move, Mr. President, that the Secretary be directed to send these resolutions to the Chairman of the Committee on Patents of both House and Senate and to the representatives and senators from the State of Connecticut.

This motion was also carried.

DR. TILESTON: Mr. President, I should like to move that a vote of thanks be extended to Dr. Sharpe for his admirable paper and pictures.

This motion was unanimously carried by a standing vote.

A vote of thanks was also extended to the Committee on Arrangements for their excellent programme.

The Smoker.

Wednesday, May 23d, 1917, at 8 P. M., an entertainment and luncheon was held in the Palm room of Hotel Taft. The entertainment consisted of vocal selections and moving pictures followed by informal singing and buffet luncheon. About 150 were present.

The Banquet.

The annual banquet was held on Thursday, May 24th, 1917, in the Hotel Taft at 6:30 P. M. One hundred and one were present. Dr. Frederick N. Sperry acted as toastmaster. The Nevin Quartette furnished music. The following responded to toasts: Dr. Samuel Garlick, Judge Robert L. Munger, Judson J. McKim, Rev. Charles R. Brown, D.D., Dr. Edward T. Bradstreet.

PRESIDENT'S ADDRESS.

PRESIDENT'S ADDRESS.

The Forward Vision.

SAMUEL M. GARLICK, M.D., BRIDGEPORT.

Members of the Connecticut Medical Society:

We read in the Prayer Book of Edward the Confessor

“There was neuer anything by the wit of man so well deuised, or so surely established, which (in continuance of time) hath not been corrupted, . . . the first and original grounds improued. . . . If a manne would searche out . . . he shall finde that the same was not ordayneed”

It is hard for any age, or for any group of men, to imagine, much less to appreciate, the difficulties of its predecessors. To this common difficulty our profession is no exception. We often hear people, and sometimes our own associates, speaking contemptuously of the work and ideas of the Fathers. Thoughtful people cannot share the sneer. They remember that in each generation there are those who make effort to face all God's truth and to meet all of man's duty. In every generation there are “seven thousand which have not bowed unto Baal.” There is no better programme, no better service than that. We, the world indeed, owe an immeasurable debt to the Fathers. Their shortcomings, the mistakes they have made, do not prove their efforts ineffectual or their purpose mistaken. They only reveal the frailty of human nature. The debt we owe to the Fathers is indeed immeasurable, can never be appreciated, represents an honorable claim which can never be paid.

In the late fifteenth century, during the period of medieval medicine, when dissection was forbidden by the clergy on the ground that it was “impious to mutilate the form made in the image of God”—although there is abundant evidence that such impiety held, only when used for scientific purposes and where the spark of life was extinct, not when effected by the rack and the wheel and such other clerical rather than medical instru-

ments;* in this medieval, dark age of medicine the gentle, fascinating Bishop Berkeley wrote, "The seeds of things seem to lie latent in the air: . . . the whole atmosphere seems alive. There is everywhere acid to corrode and seed to engender."

How true indeed it is, that as life and death flow co-mingled in our bodies, so are they no less co-mingled in all the multiple and varied relations of surging life in the strenuities of these modern days. It is of this same erudite Bishop that Pope writes, "possessed of every virtue under heaven"; and concerning whom Lord Byron wrote, "When Bishop Berkeley said 'there is no matter' and proved it,—'twas no matter what he said."

How easily that which seems new is ancient and that which really is ancient masquerades as new, may be well illustrated by a further quotation from this same profound thinker and keen philosopher of the famous Kilkenny School and old Trinity College, Dublin. Speaking of those who "betake themselves to distilled spirits" he says, "it is not improbable they are led gradually to the use of those poisons by a complaisant pharmacy, too much used in the modern practice, palsy drops, poppy cordials, plague waters, and such like, which being in truth nothing but drams disguised, and coming from the apothecaries, are considered only as medicines." The encyclopedic, if not omniscient Bishop, advises the use of "tar water" for all the ailments under the sun. It would thus appear, that to this extent at least, an Anti-Narcotic Law was foreshadowed and even at that early date a "Propaganda for Reform" was the need of the times.

Whilst, however, we are considering the relative value and usefulness of the work of our ancestors, it behooves us to hold an even balance; to keep in mind the fact that often "praises are without reason lavished on the dead . . . and that the honors due only to excellence are paid to antiquity." This is

* Since writing this paper the accuracy of this inference has been questioned and my attention has been called to a book, "The Popes and Science," by Dr. James W. Walsh. While to me not altogether convincing as an argument, Dr. Walsh's book merits and should have careful perusal by the seeker for truth.

a complaint likely to be continued, by those able to add nothing to truth,—or by those being forced by disappointment, upon consolatory expedients, are willing to hope from posterity what the present age refuses, and flatter themselves that the regard which is yet denied by envy, will at last be bestowed by time. Carlyle says: "Antiquity, like every other quality that attracts the notice of mankind, has undoubtedly votaries that reverence it, not from reason but from prejudice."

Some seem to admire indiscriminately whatever has been long preserved; all, perhaps, are more willing to honor past than present excellence. Indeed, the great contention of criticism is to find the faults of the Moderns and the virtues of the Ancients.

To these features of criticism and to these principles of accrediting praise or of adjudging merit, we of our profession cannot graciously demur. To work, of which the excellency is not absolute and definite, but gradual and comparative; to work, not measured upon the principles demonstrative and scientific (I use the work intentionally) but appealing almost wholly or altogether to observation and experience, no other test can be applied than length of duration and continuance of esteem.

Demonstration, mathematical, constructive or destructive, immediately displays its power, and has nothing to fear from the shafts of envy or the passage of years; but works like the product of our profession, tentative and experimental, must be judged by their proportion to the general and collective ability of confrères, as it is discovered in a long succession of endeavors. By these standards we are correct in ascribing honor to and in reverencing those whose labors have brought credit to our profession, made easier and more productive our present service to mankind. And the most brilliant men of to-day must graciously bow to the men of earlier days, whose courage, foresight and self-sacrifice, whose daring boldness and undaunted purpose, whose true sincerity in all that interests suffering humanity, have ever merited the approval of an expectant world.

We need not, however, to retreat to the ancient shrines of a mythological Aesculapeus, nor to the studio of that indefatigable and systematic worker, Hippocrates; to the mediæval, talented,

reckless Paracelsus; nor to the self-assured Ambrose Paré, who in the sixteenth century thought and modestly affirmed that he, in forty years, had "brought the Art of Surgery to such a state of perfection that posterity will not be able to surpass it"; nor yet do we need to retire even to the days of Harvey or Jenner, to find the names of men who have brought honor to our profession and lasting credit to themselves.

Italy, Austria, Russia, England, even Germany, and every European country, has made contribution to the renaissance of medicine. We need not, however, go even *so far afield*. America has no occasion to fear for comparison. Within the last century, yes, even within the last decades, not remotely associated with those within the sound of my voice, America has made abundant and lasting contribution of men highly skilled and giving lasting service in the arts and in the science of medicine.

Jenner's great discovery was first applied in the last half-decade of the eighteenth century. By this time a reaction had set in against the metaphysical methods of medicine that had been so alluring, and through which science had been groping. The scientific spirit of that time was making itself felt in medical practice and it may be said that Jenner's successful vaccination against small-pox gave the *coup-de-grace* to the eighteenth century metaphysical systems. Even the system of Hahneman, which although false in theory, yet was destined to influence greatly, the practice of medicine and to outlive all the other eighteenth century schools, received its death blow in Jenner's successful vaccination.

Someone has said that science *usually* stumbles into the right course only after stumbling into all the wrong ones: if it be that this is only partly true, the wrong ones still play a prominent, if not a very creditable, part. Thus it came about, that at the beginning of the nineteenth century, our profession was ready for the startling growth and marvellous discoveries to be showered upon an expectant world.

So strangely are cause and effect adjusted in human affairs, that simple acts have very unexpected effects. Thus it was, that the dismissal of one physician by the First Consul, afterward

Emperor Napoleon, and the calling of another, gave Corvisart an impressive vantage to promulgate his theory and practice of Percussion. Doubtless, Napoleon was much surprised to have his physical condition interrogated in this unusual and strange manner. However, "with characteristic shrewdness," Bonaparte saw the utility of the method, and the physician who thus attempted to substitute scientific method for guess-work, in the diagnosis of disease, at once found favor in Napoleon's eyes and was installed as his regular medical advisor. Thus from this powerful vantage, a practice which Corvisart himself had made use of for more than fifteen years was popularized, made successful, and from a seed which had lain dormant in a pile of metaphysical rubbish, for over fifty years, sprang up and blossomed, and, to change the figure, physical diagnosis, a cornerstone of modern scientific medicine, was laid. What important additions and embellishments American physicians have wrought into this structure, would be an entertaining and an enlightening study.

In 1815, Laenec, another Paris physician, by accident, discovered that the sound of the heart beats could be heard with surprising clearness through a cylinder of paper. Acting upon this hint, he devised a simple wooden instrument, applied the principle to other chest sounds, and thus Auscultation, the second step in physical diagnosis, was given to the world. At first and for some time, Laenec thought his little instrument scarcely worthy a name; later to save it from various barbarous appellations, he decided to call it a stethoscope. Its value and convenience were greatly enhanced by a binauricular attachment, the introduction of flexible tubes, and still later the principle of the telephone was applied. For these improvements we are indebted to the fertile wit and inventive genius of American physicians, some of whom have, with equally fertile *thrift*, carefully protected *their* rights by patents.

As long before Jenner, the peasantry of England had known of the preventive value of cow-pox over small-pox, so the peasant women of Poland—poor Poland—had known that the annoying skin disease from which they suffered was caused by an almost invisible insect; and, furthermore, had acquired the trick of

dislodging the pestiferous little creature with the point of a needle. From them, a youth, a would-be medical student, learned the open secret, and, going to Paris for medical study, in 1834 demonstrated it to his preceptor. Skeptical at first, this physician later became convinced and gave the re-discovered knowledge to the medical world, with an authority that led to its early acceptance.

About this same time, 1833, another young medical student, James Paget, discovered, whilst dissecting the muscular tissue of a human subject, certain little specks, which, taken to Richard Owen, conspicuous in the field of microscopy, were found to be the larvae of an hitherto unknown insect. After this discovery was made public, it was learned that these same "specks" had previously been observed by several earlier investigators; no one, however, had thought them worthy of further study. This discovery was further elucidated and made of very practical importance by our own American anatomist, Joseph Leidy, when, in 1847, he demonstrated the presence of *Trichina Spiralis* in the tissue of pork.

What makes these parallel discoveries epochal is, not the discovery of the cause for a single, or for two diseases, however useful that item of knowledge might be. These discoveries have the importance of medical landmarks, because that thereby a brand new idea was dropped into the medical mind; a veritable bomb as it proved—the discovery and proof that a microscopically minute and hitherto unsuspected animal parasite could be the definite cause of disease, upon or in the tissues of human beings and in other animals.

Another great achievement quickly followed. In 1839 Schoenlin made the discovery that the common, annoying and distressing disease of the scalp, favus, is really due to the presence and growth of a microscopic vegetable organism. Thus it was made clear that not only animal, but also vegetable parasites of microscopic size bear a causal relation to the diseases with which mankind is afflicted. This knowledge of the actual and the infinitely possible relation of animal and vegetable parasites to disease, was a long step in the direction of scientific medical

knowledge. A step, the full import and advantage of which can, even at this day, be hardly appreciated.

It was in 1788 that Sir Humphrey Davy, almost, but altogether failed to discover the complete anaesthetic effects of inhaled nitrous oxide gas. Thus it came about, that such discovery was reserved for an American physician, a Connecticut dentist, who proved to the world that a definite drug could safely produce insensibility to pain. To another American dentist, T. G. Morton of Boston, was reserved the honor, in 1844, of proving to the medical world and demonstrating before a body of incredulous physicians, the possibility of absolute anaesthesia by sulphuric aether. So much has been said and so much written on this subject that one should not make additions. For this greatest and most useful medical discovery, the world is forever indebted to America; when in 1846, in the operating theatre of the Massachusetts General Hospital, Morton had successfully and safely performed his first public experiment, the impossible had been accomplished. A miracle had been done.

Reference has been made to microscopic animal and vegetable life as the cause of disease. It were too great a study and too long for to-day, to review the many successive steps by which a definite knowledge of the microscopic cause of fermentation, putrefaction and later of anthrax and other infectious diseases was obtained.

Whilst as a fact, the primary discovery and proof came through a scientist and not a physician, Louis Pasteur, it is significant that his work was largely incited by, and the preliminary investigations made in response to urgent requests of physicians, especially one, Devaine, in the decade from 1850 to 1860. It was not, however, until 1876-77 that Pasteur gave proof of the bacterial origin of anthrax, a proof so complete that no logical mind could doubt; and also so complete that no logical mind could doubt that what was now proven true of one infectious disease would perhaps some day be proven true of all infective maladies. Hitherto the cause of contagion, by which certain maladies spread from individual to individual, had been a total mystery, quite unilluminated by the terms miasma, humus, virus and like

cloaks of ignorance. Here and there a prophet of science, as Schwann and Henle, had guessed the secret; but guessing in science is far enough from knowing. It is one thing to foreshadow a discovery, it is quite another thing to give it full expression and make it germinal of other discoveries. Now, for the first time, the world *knew*, and medicine had taken another gigantic stride toward the lights of exact science.

In a different though allied field of medicine, as a direct outgrowth of Pasteur's studies and demonstrations, there developed a complementary growth that led to immediate results of perhaps more practical importance. I refer to the theory and practice of antiseptic surgery. Dr. Joseph Lister, then of Glasgow, as early as the year 1860, struck by the boundless implications of Pasteur's revelations regarding the bacteria, set about making a wonderful application of those ideas. If putrefaction in dead tissue is always due to bacterial development, may that also be as well true of living tissue? If so, the putrefactive changes which occur in wounds and after operations, from which blood poisoning so often follows, might be absolutely prevented, if the injured surface could be kept from the access of the germs of decay.

In the hope of accomplishing this result, Lister began experimenting; with what result the world now rejoicingly knows. Not readily, nor at once, were his views or the reports of his success accepted. The wounded French soldiers in the Franco-German war of 1870 died of gangrene as they had done before. The writer well remembers with what incredulity Lister's views were received, although impressively presented in the lecture room and elaborately illustrated in the operating theatre of the Massachusetts General Hospital. I also recall with what amusement my first crude, personal efforts in application of such methods were looked upon by men, some of whom are still members of this Society. Long after that time, both in private work and in hospital theatre, the assisting operator could have been seen to draw the required ligature or suture from the retaining pin in the lapel of his coat. And the operating surgeon always carefully washed his hands *after* the operation, not before.

Time would fail me and your patience, even to name, much

more should I attempt to review, all the great landmarks and promontories in the progress toward scientific medicine during the last hundred years. Mention may be made of the discovery and proof of reflex action, of neurons and the origin and manner of transmission of nerve impulse; of localized cerebral function as contrasted with the old "Phrenology"; also perfected knowledge of the physiology of digestion and nutrition; cellular pathology, with its important corollaries of the vital characteristics of protoplasm and its decay under abnormal influences; repair of injuries or "healing by first intention," and the etiology of malignant neoplasms, the response of tissue to stimuli; also parasitic diseases, both of animal and vegetable organisms. Important to and of immeasurable value in relief and treatment in the great field of nervous and mental disorders, is our advanced and more accurate knowledge of neuropathology and its corollary, the more recent Anociation of Crile. Likewise mention should be made of the recent and important knowledge of the functions of the "Ductless Glands"; their contributing influence over nutrition and growth, function and activity, including the "Kinetic Drive."

The progress in science has been so great and our profession has with such an admirable enthusiasm laid all its advancement under service that we may now perhaps truly claim that we have a "System of Medicine." In all this magnificent progress of human knowledge toward a scientific medicine, America has taken an active, honorable and always a progressive part. No important advance which has not found either its initiative or a good second within the limits of our own country, and mostly within the membership of our major but not our parent American Medical Association.

For reasons not difficult to understand, reasons of age, experience, finance and forms of social organization, American medicine, until recently, has been more especially a study of methods, and a service of practical application. As a nation we are yet young; have had no closely interrelated and dominating governmental control. We may have been inefficient, but if efficiency means Prussianizing our society, our schools, our laws

and other social forces, pray God indeed, that we may be delivered from "efficiency"—an efficiency that knows no compassion, stops at no deceit, hesitates at no horror to elevate its cause or attain its end. Even then, the Kaiser having a toothache must needs send for an American dentist. How to combine efficiency with liberty, that is the problem in America, both educational and governmental; how to make citizens efficient, refined, moral, free. This is a far greater problem than to make an efficient Germany.

Until recent years, at least, we have had no great accumulations of individual wealth; until lately our higher schools, either of general culture or for technical or professional study, have been established and maintained by private gifts or individual endowment. And all, whatever the source of maintenance, have been the outgrowth of an intelligent people appreciating the need of the best and willingly striving and cheerfully contributing toward its attainment.

Newness is essentially abundant in necessity and needs. It is usually embarrassed for want of means. Necessity not only is the "mother of invention," but is also the efficient spur to practical application.

It consequently follows that in medicine, as in all other affairs, our people have been blessedly more efficient than theoretic, more practical than experimental. If it be the duty of our profession, and I venture no one will deny this proposition,—if it be our duty to make application of all scientific and practical knowledge to the preservation of health in those who are well, to the relief of distress and pain in those who suffer, and for the cure of disease and restoration of health to those who are sick, it follows that in real usefulness to the community, the medical profession in these United States has been second to none in the world; and our fellow compatriots, our daily clientele, rich and poor, autocrat and democrat, have alike been served with an effectiveness that compares favorably with any other people which may be named. A limited, but I believe, an intelligent observation of foreign medical practitioners in foreign communities and, as well, of foreign medical men transplanted to American communities, leads me to concur in this opinion.

We must not, however, be satisfied with present attainment.

"On stepping stones of our dead selves
We rise to better things."

From the living present and from the dead past we are permitted to make forecast of that which is to come. Our interest and our hopes center about that which may happen within our own land and make or mar the pleasures of our own firesides.

It may in truth be said, that in the past we have been lacking in opportunity for higher research or for purely scientific study; that many of our schools of medicine, falling from the high, altruistic purpose of their founders, had degenerated into almost purely commercial ventures, a possible defect in all institutions in democratic society; that our practitioners "smelled of the soil," had but meagre education and scanty equipment, were poly-pharmacists and empirics. It cannot, however, be truthfully asserted that American practitioners have, as a rule, been of limited recourse when confronted by difficulties of practice or the problems of treatment. In war or in peace, in any emergency, Americans can usually be depended on to exhibit common sense and the power of quick adjustment. Efficient resourcefulness is an American trait and belongs no less to the physician than to other callings. Voluminous and brilliant are the names of those who have brought honor to our calling in militant art, abstract science or beneficent practice. A record within our first one-hundred-fifty years, which can be equalled by few and excelled by none. The record is safe and it is a good one.

The future is bright with hope and pregnant for realization. Private wealth has accumulated as never before in the history of the world. With generous volition it is devoted to the interests and maintenance of general and scientific and professional education; and to laboratories of research and experimental study. In contravention of what has been so often said, I venture to assert that these institutions of education and of research are as free for service, less embarrassed by political or other external restraint in freedom of thought and action; as efficient in results and far more enthusiastic in individual effort, than is any group

of like institutions in other lands. For their present work we have no need to blush, and toward their future we may look with assurance of munificent maintenance and most eminent and serviceable results.

During the last two or three decades, our profession has earnestly sought to remedy its defects in education, in personnel, and in *esprit de corps*. In promotion of these ends we have invoked aid of the law-making bodies, either in passage of new laws or in reconstruction of already existing laws. Graciously or reluctantly, our requests have been complied with, sometimes, yes, indeed usually, against insistent and bitter opposition. In almost every State in the Union we now have adequate Medical Practice Acts. I believe that opposition to these wholesome laws has not been because of any inherent antagonism to our profession, from any indifference to our needs or to the welfare of the community. I would rather believe it has been due to an uncertainty regarding what constitutes medical practice, and a lack of knowledge as to what is medical science. In any event, the principle of State enactment as applied to the practice of medicine is now well established. Not in all things has the application of these laws been to our advantage or for the welfare of the community. Quacks and pretenders are no less numerous. I believe they are more aggressive and are better intrenched in position, and being authorized by law, are cordially accepted by the people. Formerly they were either entirely without the profession or were *persona non grata* when within the profession. Now they are openly recognized and, in company with incompetent midwives, have authority of the State with its imprint upon their certificates. Thus it often happens that neither medical science nor the community are the gainers; nor is our personal status materially, if at all, improved.

A long, sincerely interested and (permit me to say it) intelligently critical observation of the continued application of law as related to medical practice and the welfare of the people—and that is the supreme end and reason for all law—leads me to the conclusion that what we now need is, not more law and pressure from above, but a larger purpose and a broader spirit among ourselves; a more *united*, not necessarily a more *organ-*

ized, profession; a pressure from the spirit within that maketh alive; not compulsion from authority without, which destroys initiative and curbs individuality.

National medical practice laws, even if possible, should not be our present goal; nor as yet, is a National Medical Examining Board desirable. Our State requirements are now for the most part sufficiently high. Give our young men a reasonable chance to enter the profession; in any event much of their real training must be gotten in the field of real practice. No legislative enactment can, of itself, make a competent physician, and no legislative body will knowingly consent to such restrictive laws as would prevent young men and women from entering upon a life-work at a reasonably early age with a reasonably competent education and practical equipment. Should such law inadvertently be passed, however much approved by our profession, it would soon either be repealed or otherwise become inoperative.

Cultivate individual, intensive study and practical observation in hospital and in practice. Stimulate such study by emulative and competitive reports in medical associations and local societies. We should thus approximate the advantages of the former preceptorial work, the absence of which at the present time is a very great loss to the medical student and would-be practitioner. To-day, I seriously doubt if there is a man in this body, having fortunately had such apprentice work under a competent preceptor, who would willingly consent to substitute the same for six months in medical school or a year of ordinary internship. Neither college nor hospital, alone or combined, can, of themselves, make the competent practitioner of medicine. Nor does the hospital training alone make competently satisfactory individual home and bedside nurses. Immediate contact with individualistic work, cannie suggestions, discreet correction of faults and sympathetic help in failure, is the filling which is lacking in our present-day medical education.

Personally, the writer could place no financial, social or professional value upon just such service rendered to himself in student days and early professional life by men, gentlemen, practitioners, not one of whom occupied a chair in college faculty.

Let me delay to mention Dr. Pliny Earle, Superintendent of

the Hospital for the Insane at Northampton, Mass., gentleman, author, executive officer, alienist of international reputation and honorary member of this Society. Dr. Earle was actively earnest in bringing about the significant change of name of institutions for care of the insane, from the then customary term, "Insane Asylum," to "Hospital for the Insane," a title which was significant of the very great change in professional notions as to the nature, cause and treatment of the insane.

I would also make mention of Dr. Jeremiah T. Denison, most gracious of men, twice a graduate of Yale, member of this Society, expelled therefrom and sometime President of the Connecticut Homeopathic Medical Society. Last, but by no means least, of the helpful men which I have known, I will name Dr. Robert Hubbard, very well known to many here; also a graduate of Yale and then known as "one of Plumley's Fiddlers"; member of this Society, once its President; most lovable of men, a delightfully helpful counselor, considerate in judgment, accurate in diagnosis; up to the latest advance in treatment, and the most widely informed and best practical therapist I have ever known. He was at no time the subject of therapeutic faint-heartedness. Dr. Hubbard equally with Alonzo Clark fully realized the curative value of opium in acute peritonitis and the physiologic, if not the anatomic theory for its action, prior to the introduction of "Kinetic Drive."

I gladly here give honor to these men and acknowledge an immeasurable and unrequited debt.

We do not require seven or eight years in the forming period of a young man's life to equip him for the practice of medicine. Given a competent general education in those subjects which quicken and broaden and deepen life, including the subsidiary sciences introductory to medicine, an additional foreign language if he wishes,—but not compulsory,—four years or its equivalent in medicine, one year in hospital or two as assistant with a competent preceptor as an equivalent, and any suitable young man of ordinary ability can fit himself to do good work in medicine and to pass the requirements of any sensible State Board.

Let further and higher examinations be voluntary, carry with their certificate evidence of higher practical attainment or exceptional fitness for surgery or other of the specialties. And, further, not only let these higher examinations be voluntary, let them be made within our own profession by authorized representatives of the various State societies or the National Society, or upon advanced courses in medical schools. By a similar method to that outlined, containing elements of mutual help and interdependence between teacher, pupil and later confrère, an improved *esprit de corps*, a spirit of mutual help in practice, would be engendered together with a dignity of character arising from within the profession and not enforced from without. Our medical societies would represent—I was about to say would *again represent*—an influential body, association with which would be a valuable asset in practice as well as in professional relations.

Let the higher examinations represent advancement by individual merit and personal attainment, and our young men would enthusiastically strive and gladly labor to obtain the certificates. Whatever theories may be advanced for State examinations, in practical effect they can only be a self-defensive proposition; a means of sifting out the unfit, not of testing the merits of those *most* fit. Essentially all that pass are on a level; the least qualified, if he can “pass,” is given equal standing before the community, with the best; subsequent attainment depends too largely upon political favor, personal trickery or social status; it becomes too largely a commercial proposition. “Every man for himself and the devil take the hindmost,” for in this world there is no such thing as mental or economic equality, and there never will be.

By the scheme outlined above, we would keep alive and revive within the medical profession, the same individual and initiative effort which has so distinctly marked its brilliant past. And, gentlemen, we *shall* do it, whether in this way or in some other, we shall *do* it. Not a single element of any man's thought or deed is ever lost or forgotten. It goes with all its mixture of quality to work itself into, and qualify the instincts, disposition

and doings of coming generations. As we lay our ear to the din of the present we find its undertone to be the immeasurable murmur of the past.

In our profession the actualities have never been so great as they are now. Never before has our profession made so strong an appeal to young men as it does to-day. To the man who loves science for its own sake, the field is large and ever broadening; to him who would serve his fellow men, no avenue is broader nor prospect more alluring; and to him who will love his work for its science, for its art and for its service, the financial rewards will also be adequate. Personally, I sincerely wish I could begin again.

It remains, however, for us to appreciate that we are part of *all* intellectual and moral forces that make for righteousness and for the betterment of the world. Unless we consciously and with purpose, bring to each task, to each individual a vision of better things; to each downcast patient, a hope for the future; and to each broken life and self-abandoned heart the inspiration of a sympathetic spirit, we fall short of our high calling. Without this, we, through our own defects, fail to reach the most beautiful and best and fail to win the richest prizes of life. Having all this, our old men, in the roseate hues of the closing day, rejoicingly see harbinger of a better day to-morrow.

Our young men coming into a profession with a brilliant past and having a present of more and larger definite knowledge than the world ever heretofore possessed, can look forward to a period of scientific attainment and practical application never yet equalled.

And it behooves *all of us* to drop all medical pettiness, to get in line with modern medical efficiency, to forget our little narrownesses and to act as a unit, first in the defense of Our Country and always in maintenance of a United and Independent Profession.

With large foresight and prophetic vision we may enthusiastically cry:

Non est ultima thule; plus ultra.

SCIENTIFIC PAPERS.

Some Problems of State Health Organization.

KATE C. MEAD, M.D., MIDDLETOWN.

One of the ablest of Western college presidents once opened an address with the words, "Thank God I was born in that little yellow spot on the map called Connecticut." To this let us add, "And thanks be to the powers which have given to Connecticut a state department of health by the grace of the legislature of 1917"! Although we are not unmindful of the excellent work which was done by the Board of Health during the years while the new science of public health was developing, we are so dazed by the new "Act" as to wonder if our vision is blurred or if we are listening to futurist music. On studying each of the sections, however, we see the substantial old foundations of the past upon which are to be built the new superstructures in accordance with modern progress in the science of public health. When our motto was, "Two cents for health," a postage stamp was about all that could be bought for the money, and it is difficult to comprehend how so much good could have been done with so small an outlay; but now, with our hospitals taken care of, our sanitariums and reformatories and prisons all in the zone of progress, we can take courage and plan to go on with the business of living, while we pledge our allegiance to the Commissioner of Health.

The possibilities of beneficent health legislation may be seen in the reduction of London's death rate from 80 per cent in the seventeenth century to 14.3 per cent in 1914, under the organized efforts of John Burns, and in New York's death rate which was reduced 22 per cent during the half-century of its old Board of Health. But death is only one of the results of an inadequate health programme. Sir William Osler, early in the war, pointed out that in England the loss from the inefficiencies of laborers in time of peace was as great as the loss from bullets in time of war. If England and America both could have learned this lesson

earlier, they would have been spared the humiliation of finding from 4 per cent to 10 per cent of their young men rejected in a physical examination for army service. And if France had taken care of its tuberculosis problems according to the dictates of science and preventive medicine, its war-disabilities would not have been such a reproach to the nation which, it is said, was hardly more organized for health than were the ancient Romans, for, when Cæsar advised them to drain their marshes in hope of reducing their disability from malaria they replied that they did not wish to be taxed for such a purpose.

It is therefore fortunate for us that our legislators have given heed to the advice of those who are skilled in the business of conserving the public health, and have appointed a commissioner of health who shall be to the State what a president is to a great railroad. Mr. Justice Miller is quoted as saying in a lecture on the Constitution, "The nearer we approach to individual responsibility in the executive, the nearer will it come to perfection." To this we may add the remark of John Stuart Mill, who says, "In a democracy, work which requires skill should be done by those who possess it." The fitness of a candidate for appointment as health officer, therefore, should not be determined by the fact that he has been a successful practitioner, or a good bacteriologist, or a politician, but by the fact that he understands the science of public health administration, the key to which is the disease carrier. No longer may the health officer give his time to the fumigation of houses, to the removal of rubbish and garbage, or to the disposal of dead dogs in the highway, but to the disease-breeders and carriers, whether biped, quadruped, or invertebrate. If such problems involve the expenditure of too much money by any rural district, it soon may be possible to obtain Federal aid for them in certain cases as, for example, in the destruction of rats, which not only carry disease but destroy \$35,000,000 worth of property every year, or for the investigation of slaughter houses and stream pollution, both of which are menaces to the national health as well as to special districts.

Until adequate funds can be secured, however, especially for the rural districts and small towns, other means must be found

for accomplishing health improvement in Connecticut. Fortunately, the new health bill provides for the consolidation of cities, boroughs, or towns, for the purpose of forming sanitary districts under one health officer. The work of such an official is to be carefully outlined by the public health council, and prosecutions for violating the sanitary code are to be rigidly enforced by the county health officers. But before a city or town can properly reorganize its health department it should have a "health survey," made by an expert authority on public health, upon whose findings all reforms should be based. New Haven has recently had such a survey under the supervision of Professor C.-E. A. Winslow, who has also taken charge of a survey for Middletown. By means of an epistolary survey Franz Schneider, Jr., of the Russell Sage Foundation, has found that of the cities in the United States having a population of 25,000 or over, one-fifth had no medical inspection of school children, one-third had no laboratory diagnosis of communicable diseases, three-fourths had no housing laws, one-fourth made no effort at health education, six-sevenths had no programme against venereal diseases, one-half had no organization to combat infant mortality, and three-fourths had no coherent work against tuberculosis; all of which goes to show that the science of public health is undoubtedly in its infancy, and requires skilled treatment.

One of the prime necessities of public health organization is to educate the public to demand the care of its health; until this is done the burden of extra taxation will not be cheerfully borne in a city like Middletown for instance, which has been accustomed to pay only from five to eight cents per capita for such a purpose. Ten times that amount is paid for police protection, and twelve times that amount goes to the fire department, both of which are more spectacular but not more important. Certainly pre-natal care of the mothers, care of the babies, and thorough medical inspection of its school children are worthy objects of large appropriations from the city treasury. It is said that fifty cents per capita should be the minimum expenditure for a city's health budget, but we find Waterbury spends fifteen cents for this purpose, New Britain forty-four, New Haven twenty-five, and

Hartford sixty-six; but none of these equals Seattle's ninety-eight, and fortunately none equals Woonsocket with its four cent outlay.

That Middletown has a comparatively low rate of infant mortality is, therefore, due largely to its philanthropic societies, and not to its health organization. The death rate of children under two years of age in 1911, before the institution of the milk station, was 170 in the 1,000. In 1915 this had fallen to 96, although it rose slightly in 1916. The deaths from preventable diseases had also fallen from 90% in 1914 to 77% in 1916, one-half of these being from pneumonia. That still-births in Middletown (4½%) average slightly higher than the still-births in Manhattan (4%) may be somewhat accounted for by the fact that in Connecticut the midwives are not under any medical inspection; they are poorly trained, but they superintend about one-third of all the cases of childbirth, chiefly among the foreigners, whose infant mortality and still-births average five times as many as among the American population. This is therefore another one of the problems for the Health Commissioner.

Still another problem concerns the children between the ages of two and six, who are quite neglected by both general and special health agencies. When children enter the city schools the medical inspector frequently finds their teeth defective, their throats full of trouble, their bodies undeveloped, and possibly their eyes and ears permanently ruined. The country children have even less medical attention. Dr. Thos. D. Wood, of Columbia, says that of the 20,000,000 school children in the United States three-fifths attend the rural schools. There are 250,000 rural schools in this country, every one of which should be a health center; but except where the boards of education have been given authority to attend to the sanitation of the buildings nothing is done to improve the health of the pupils. Medical inspection is, however, by no means uniformly well done. Where physicians give their services voluntarily, or where they merely visit a school when summoned, there is no real inspection according to the standard set by Dr. Sherman, in Bridgeport, with its whole-time physician, its corps of nurses, and its special clinics.

Norwalk, for example, is credited with twenty-four school physicians, Wallingford with nine, Hartford with five physicians, a few nurses, and a good dental clinic, New Britain with three part-time inspectors, New Haven also with three, while Middletown has part-time services of only one doctor and a very good nurse. We see, therefore, that the system is entirely out-of-joint. Only twenty-five of our one hundred sixty-eight townships in Connecticut have visiting nurses, so that we have the anomaly of thirty-nine nurses and one hundred and three doctors for the school children of our entire State. Under such conditions there can be no coördination of statistics, and no concerted attempt at the correction of defects. Moreover, with but few exceptions, there is only twenty minutes' teaching of hygiene during the week. And here again is the anomaly of the ordinary teacher adding this subject to the three R's besides attending to the health of her pupils. In our present health programme the teacher must be an expert in testing eyes, diagnosing pediculosis and contagious diseases, and in deciding when to send children home and when to allow them to return to school. Where does she, or occasionally he, obtain all this special knowledge? If the teacher is not able to do these things no one else is appointed to do them, and we find, for example, in New London County, through a questionnaire sent out by Dr. J. G. Stanton, that of the seventy-nine rural schools in that county not one has either medical inspection or a visiting nurse although there are from 20% to 50% of foreigners in each town. The buildings are all in fair condition, the sanitary arrangements are modern but not kept clean. The same condition is found in Middlesex County; fairly good buildings, dirty out-houses, poor play-grounds, no physician except in time of epidemics, and one part-time visiting nurse. We know that our rural population is not as healthy as our city population, for there are Poles and Bohemians, Italians and Jews, among whom money for doctors is scarce. Our conditions cannot be unlike those in Pennsylvania where it was found that three-fourths of the children in the rural districts were suffering from physical defects including poor digestion; their defects were much more serious than those of city

children owing to their poorer food and lack of endurance. Such children would gain more of real value from the teaching of a specially trained visiting nurse than from years of book learning. If the health department would provide a traveling health exhibit for the use of the rural nurse or doctor, and if a dentist could visit rural schools with his instruments once a year, and if the nurse or teacher could give lessons on diet and home economics to the villagers during the long winter evenings, as well as homely talks on social hygiene and the care of children, much improvement would be seen in the health and morals of each community. Medical inspection by district sanitarians, under the commissioner of health, would soon prove to be valuable, but naturally, they would be met with opposition by the "League for Medical Freedom," by the Christian Scientists, by patent medicine vendors, by ignorant tax-payers, but never by the educated members of any community who are interested in all the problems of suburban life.

We have considered but few of the questions of public health organization which confront the new state department; and while we may, as physicians, although uninvited, criticise and advise our Commissioner, we must uphold him loyally, and by concentrated action beg the next legislature to add to the bureaus already created another of equal value for child hygiene. There is need also of a bureau of publicity through which there may be disseminated literature on health for the education of old and young, printed in as many languages as our population might be found to need.

It is safe to say, moreover, that some of us, the physicians of Connecticut, need education in this new science of health. In twelve of our larger universities there are offered courses leading to the title of Doctor of Public Health, and subjects from their curriculum should excite in some of us as lively an interest as others of us find in a surgical topic like "A new method of operating on strangulated right femoral intra-peritoneal cystocele associated with an enterocele," or in a medical topic "On the biologic, pathologic and chemical consideration of psychasthenia." It is probably true that the modern gospel of health may reduce

to a vanishing point many of the diseases from which we obtain our practice. The physicians of Chicago made two million less calls the first year after typhoid fever was stopped by modern sanitation. Nevertheless, with all the newer specialties in medical science there will undoubtedly be work enough for us all, and the results of this higher specialization, and of public health organization will be seen in the greatly increased efficiency, wealth, and civic pride of every community. Health is purchasable, and physicians especially know that it is worth more than money to him who has it and him who gives it.

DISCUSSION.

DR. C.-E. A. WINSLOW (New Haven): *Mr. Chairman:* I suppose there has seldom been a more rapid and more radical revolution in the health conditions of a State than was worked a week ago last Friday when this new bill was passed. I have been accustomed to tell my classes that Alabama had the worst system of State health organization in the country, and Connecticut next. Not that it had the least efficient Board of Health, but that the plan of organization, the legal provision, was perhaps one of the most imperfect.

We have had a State Board of Health with an excellent system of vital statistics and an excellent laboratory, and practically nothing else. It had almost no powers. We had every town Board of Health and every city Board of Health working as it chose producing the sort of chaos that existed last summer in attempting to fight the infant paralysis. We had the local health officers throughout the State appointed by eight lawyers, themselves appointed by the judges of the Superior Court, with no technical knowledge of the subject with which they dealt.

Over night that was changed, so that to-day we have a health system which includes the most modern essentials of sanitary organization. These are, first of all, a reasonable power given to the state authorities over the local authorities; second, the concentration of that authority in the hands of one executive; and third, the establishment of a public health council which has the power to frame a state-wide sanitary code. All those things are given by the new law, and they are the three essentials of good health legislation, first fully worked out in the New York law and embodied in the Maryland law and copied in the Massachusetts law and during this present legislature up in Maine. So three of the New England States are now working under effective health legislation.

This new law will mark the beginning of everything that those who have been interested in the health situation of the State have desired. It was

made possible by the far-sighted leadership of Dr. Black, the secretary of the State Board of Health; of Dr. Root, and Mr. Jackson, and other members of the State Board of Health; of Dr. McKnight and Dr. Mead, representing this Association; and by the support of a whole group of public-spirited citizens. I am particularly grateful to Dr. McKnight because at the hearing at which this bill was introduced it was my duty to begin the discussion of the subject. I came in late and saw a room full of people and inspired by the sight became quite eloquent over the awakening of popular interest in public health which has made possible this magnificent outpouring of people. It transpired later that nine-tenths of them were Christian Scientists who had come to oppose the bill. The effect of that break on my part was only neutralized by the splendid speech Dr. McKnight made on that occasion.

But the thing that has encouraged me most in the matter has been the reception that the plan has received from the political leaders of the State. The Governor, who embodied it in his message, ex-Governor Woodruff, and Colonel Ullman of this city, Speaker Healy and Senators Bissell and Stoeckel and Representative Austin, and, I think everyone who has looked into the matter at all has realized it at once as an obvious and necessary thing. And the lesson is most encouraging, that public health is coming into its own. Of course, we shall want more public health things, we shall want additions to the appropriations, additions to the power, but for the next two years the thing to do, as Dr. Mead has said, is to give to the commissioner our hearty support and our best efforts in local development. After all, the local health department is the center, the real effective focus. This State Department that has been secured by the State of Connecticut will coördinate and assist the work of local departments, but the real problem of local sanitation of the State is up to you and to me all of the time, up to the localities in which we are living, because it is the local department that is going to do the real work, guided by the State Department; and an efficient local department is now within the power of any community. With the State Health Department to guide and lead there is no limit of health efficiency that it is not possible for us to reach.

And it is particularly fortunate, as Dr. Mead has implied, that this thing comes at this time. Dr. Biggs has told us what has happened in France, how France to-day has five hundred thousand cases of tuberculosis because of the neglect of things that have been done in this country and in England, and therefore it is doubly fortunate that we in Connecticut can go ahead in this pathway that has been marked out for us.

DR. J. G. STANTON (New London): *Mr. Chairman and Gentlemen:* Dr. Mead has been kind enough to mention my name as having been of some assistance. However, if the other members of the Committee have

been of no more assistance than I have, then I am afraid we all have been derelict.

I have been connected with the Board of School Visitors of New London for quite a number of years and lately with the State Board of Education; and this matter of inspection of school children has lain very much on my heart.

It has been only within a few years that we started it in New London, but the results we have obtained have proven that if we only show the people of a community that it is an economic saving to inspect their children, no matter what the cost for that inspection, they will second any effort in that direction.

When we first began our inspection in New London the bills were rather high, and there was some kicking over the amount of the bills we presented; but it was so soon demonstrated as the result of these inspections (the physicians at first giving voluntary services), that the children were better off in health and that there were less doctor's bills, the parents very quickly saw the connection between school inspection and the improved conditions of health in the children.

I think the only way you are going to get favorable rural community sentiment in support of school inspection is by showing the connection between such inspection and better health of the children with consequent less expense for the care of their children through illness; and not, primarily, through legislation or governor's proclamation or health commissioners acts or suggestions.

DR. W. S. BARNES (New Haven): Mr. President, I think one of the most important things for the health of the State to-day should be the matter of venereal diseases. I think many men at the present time would make recruits for the army were it not for the fact that they are infected with venereal disease. Now it seems to me that although in cities, especially of this size, a certain effort is being made to care properly for these diseases, there is still opportunity for greater work along these lines. We have in New Haven a Genito-Urinary Clinic connected with Yale Medical School for the treatment of these diseases, but this clinic is run only during the day. Now we all realize that it is impossible for men who work during the day to attend a clinic for treatment at the same time. We should make all effort possible to get control of the venereals present among the people. The man-power of the nation is seriously affected. In Germany and France they are organizing clinics at various places in order that men who are returning from the front may undergo examination before they are permitted to return to their families. A well-organized and equipped clinic in the large cities of the State would be a great factor in decreasing the danger from venereal diseases, whose prevalence has been more marked during war, as history shows.

Treatment of Congenital Club-Foot.

ANSEL G. COOK, M.D., HARTFORD, CONN.

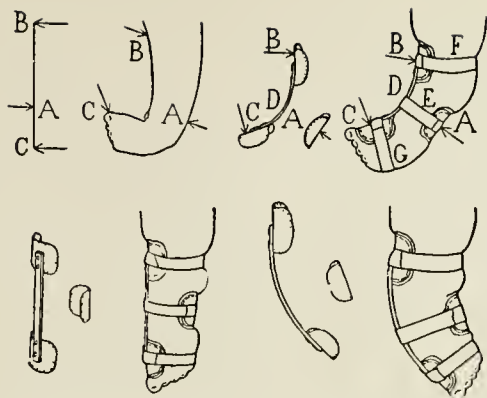
Henry Ling Taylor in his book on Orthopedic Surgery has concisely expressed the consensus of opinion on Congenital equino-varus, the commonest form of club-foot, and one of the most common congenital deformities.

There is, in the form under discussion, no primary defect in the embryo and no paralysis; the foot has simply been shaped or molded to the posture forced upon it by its constricting envelope.

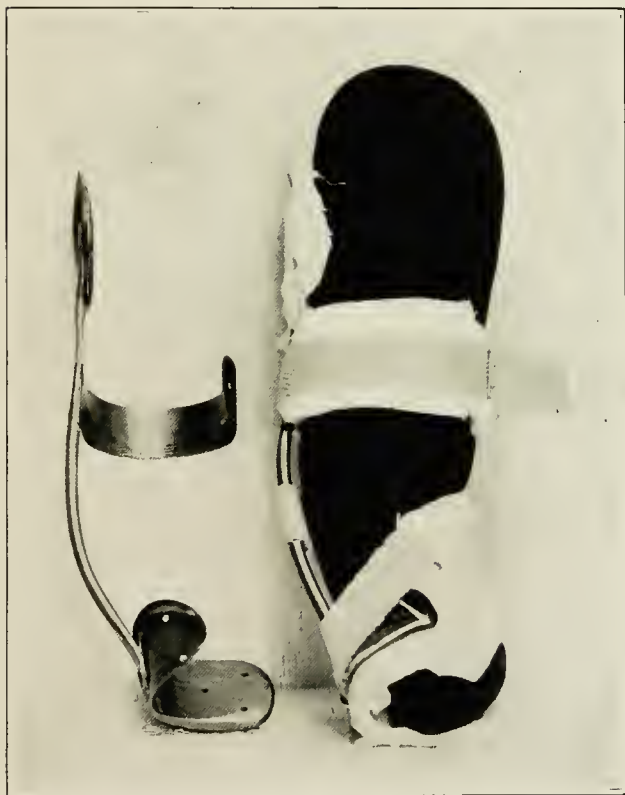
The deformity is of all grades from very mild to very severe; when fully developed it presents the following elements: (1) Adduction of the forefoot (varus); (2) inversion of the foot; (3) inward rotation at the ankle; (4) dropping of the forefoot (cavus); (5) dropping of the foot at the ankle (equinus). The symptoms consist in the deformity and consequent stiffness, lameness and disability.

The natural tendency of the affection if uncorrected is to get progressively worse. Treatment consists in first correcting the deformity and second holding the foot in the corrected position till the over-stretched tissues have contracted and the normal muscle balance is restored.

This is accomplished by manipulation to abduct and evert the foot and by continuous mechanical pressure against the deformity, made by metallic or plaster of Paris splints. The foot is to be gradually unfolded or remolded by overcoming first the varus element, later the equinus. The foot may be allowed to drop and leverage applied by a splint on the inner side of the foot and leg. The Judson splint, made of a strip of brass with a half band at each end properly padded, and a free band applied to the outer ankle, may be securely strapped to the inner side of the foot and leg by adhesive plaster, and gradually straightened as the foot yields. This may also be done by a plaster of Paris



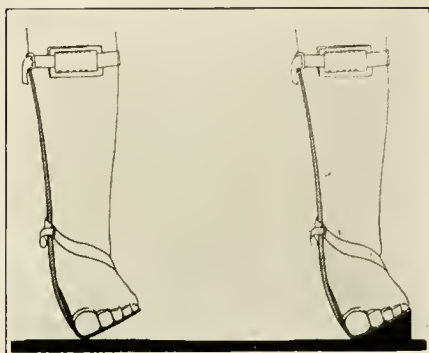
Progressive Correction of the Varus Deformity by Continuous Leverage Applied by Means of the Judson Splint.—(*Judson*)



Author's Modification of the Judson splint.

A

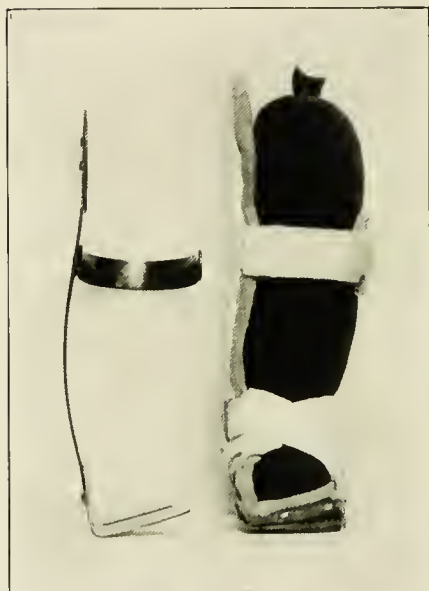
B



- A. Judson Walking Brace.
 B. Judson Walking Brace as balanced by author, making use of Triangular leather wedge to prevent rocking.



Author's walking brace before padding and straps are attached.



Author's Walking Brace.



Foot-piece of Author's walking brace before padding and straps are attached, showing how brace can be bent.



Cast of foot of child, showing line of skin incision.



Cast of foot of child, showing line of skin incision.

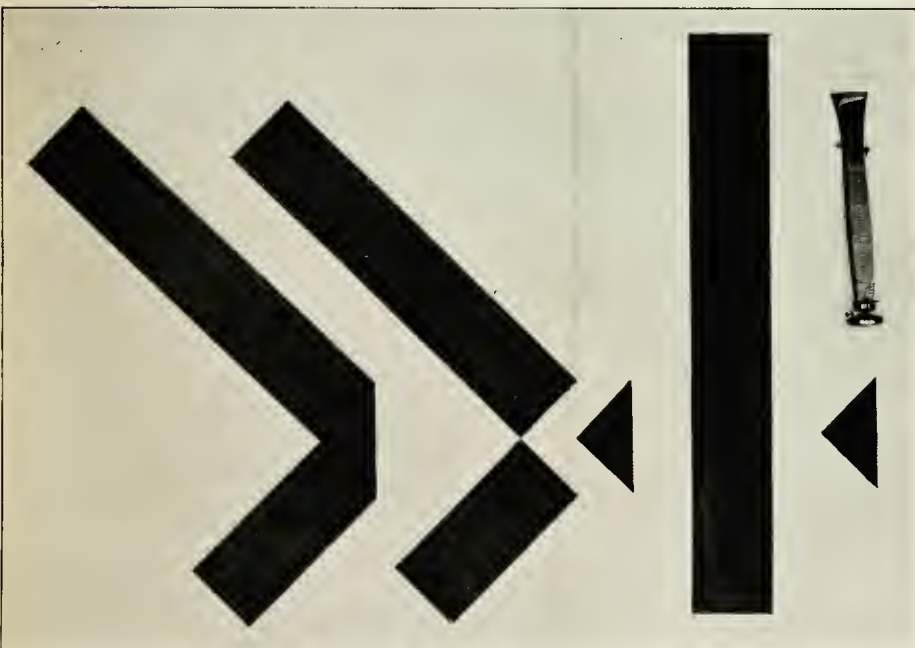
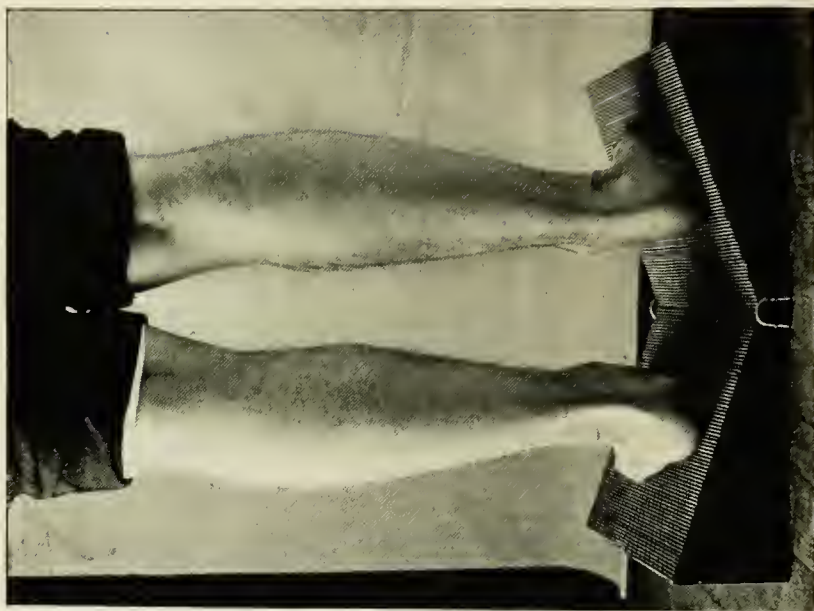


Diagram showing how wedge of bone is removed and foot straightened.



Model standing on incline planes showing elevation of
outer border of feet, anterior view.



Model standing on incline planes showing elevation of
outer border of feet, posterior view.

A



B

Casts of feet of child, anterior view.
B was like A before operation.

A



B

Casts of feet of child, posterior view.
B was like A before operation.



Before operation, anterior view.



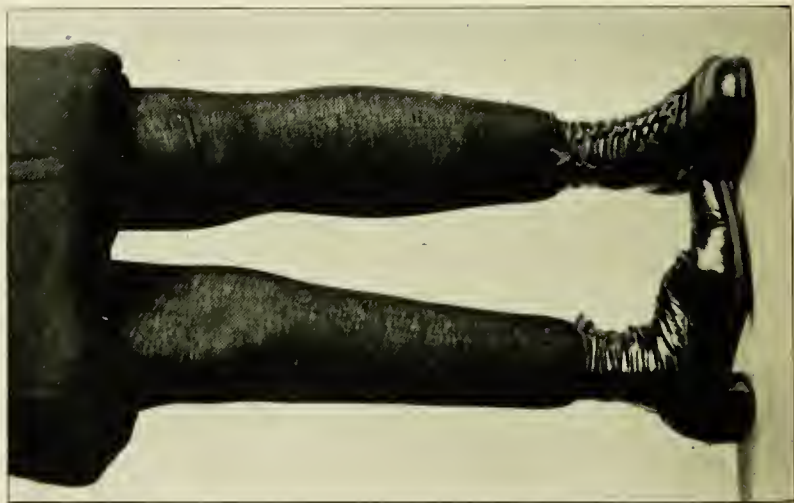
Twenty weeks after operation, anterior view.



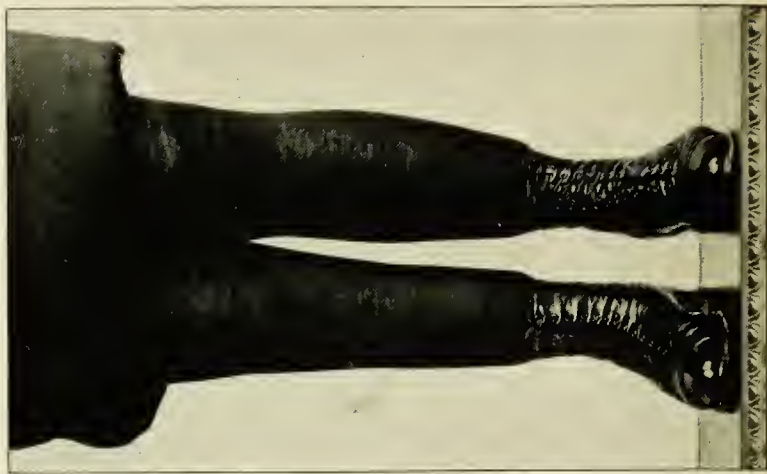
Before operation, posterior view.



Twenty weeks after operation, posterior view.



Before operation.



Twenty weeks after operation.

splint applied in the best posture of the foot and renewed and straightened once a week.

Thirty years' experience of operations for club-feet have taught me that some congenital club-feet yield much more readily to treatment than do others. The great trouble with all methods, whether plaster of Paris or braces are employed, is to hold the foot in the corrected position. It is impossible to use too great pressure and the little feet wriggle themselves out of position, particularly when the brace is put on by some untrained hand.

My routine treatment, which I have not changed for many years, is as follows: I begin treatment as soon after birth as possible. I use a modified Judson brace making pressure on the outer side of the leg and counter pressure on the inner side of the knee and foot. One point of pressure and two points of counter-pressure. As long as the heel is drawn up and the three points of pressure and counter-pressure remain in a straight line, no trouble is experienced. When the heel begins to come down and the one point of pressure and the two points of counter-pressure are no longer in a direct line there is danger of losing control of the foot and various modifications of the brace have to be employed to prevent the foot from twisting.

I have recently perfected a simple and efficient walking brace which has given satisfactory results in actual use. The principle of my brace is the same as that of the Judson brace, one point of pressure and two points of counter-pressure, but the advantage of my brace consists in the fact that I use a double series, one point of pressure and two points of counter-pressure acting vertically on the leg and heel and one point of pressure and two points of counter-pressure acting horizontally on the foot.

When the brace is to be used in walking I depress the inner border of the foot by elevating the outer border of the brace. I do forcible correction when I want to save time or when I want to make a thorough examination of a new case. I cut only such tissues as I cannot stretch. In old relapsed cases I straighten the foot as far as I can by means of braces, manipulations and tenotomies and then if the foot is still deformed I do a tarsectomy.

Tarsectomy has been practised for so many years and by so

many surgeons that I am quite unable with any degree of certainty to give credit to the originators of the operation. It is so simple, so easily performed, so safe and the result so surprisingly satisfactory I feel that it would be more universally practised if it were more thoroughly understood by the profession. I therefore present for your consideration an exact description of the operation which, in my personal experience, has proved the most useful.

This is an operation for relapsed club-foot, cases that have resisted the ordinary methods of treatment. There is no age limit, no preliminary treatment and no after treatment beyond the time required for the healing of the wound.

First: If necessary, subcutaneously divide the fascia on the inner side of the foot and also the heel-cord; then bring the foot into as good position as possible, using nothing but the hands and being careful not to bruise the tissues.

Second: Make an incision through the skin and superficial fascia just in front of the external malleolus on the outer side of the foot. The skin incision should be perpendicular from the bottom of the foot to just above the bend of the ankle.

Third: With an osteotome remove a large wedge of bone; make the first incision far back, just in front of the fibula. Pay no attention to the periosteum or peronei tendons. Cut the bones *completely across* and remove everything. Be sure to make the wedge large enough.

The foot can now be brought without force into excellent position, and by giving the anterior part of the foot a quarter turn, its outer border can be elevated. It is vitally essential to the success of the operation that the outer border of the foot be elevated. In order to do this the tarsus is cut completely across to enable the operator to give the anterior foot the quarter turn which elevates the outer border.

It is claimed for this operation that flat clean surfaces of bone are opposed. There is no cavity to fill up. The wound is a clean cut and there is no bruising or mangling of the surrounding tissues. No sutures except skin sutures are required. If the wedge of bone is sufficiently large and the angles of the wedge

are correct, there is no tendency to, or possibility of, a relapse, as every step the patient takes tends to maintain the bone in its new position.

Personally, I use a light retention splint in preference to a plaster cast. Young children will often walk at the end of two weeks.

The dressing is worn from six to eight weeks, when the patient is ready for an ordinary shoe.

The important thing in this operation is to remove the right shaped wedge of bone. The older the patient, the less liability to relapse. When relapses occur they are easily corrected. Paralytic club-foot is more likely to recur than congenital club-foot. I have one paralytic club-foot in a very young child which has once relapsed and has been cured by a secondary operation. The foot is now easily held in perfect position by a simple ankle brace and has every normal motion. The brace could be dispensed with by doing a tendon transplantation but the child is so comfortable as she is and the foot is growing so evenly that I hesitate to disturb present conditions. I believe that if I should discontinue the brace and not do a tendon transplantation, this case would ultimately relapse and require a third operation.

In one case, and only one out of thirty, there has been some interference with the growth of the fourth and fifth metatarsal bones of one foot. Whether this was due to the operation described above, why it should occur in one foot and not the other when both feet were operated on, or whether it was due to numerous previous operations of various kinds, I do not know. At all events it does not interfere with the usefulness of the foot.

This operation performed early insures the free, normal use of the foot and the atrophy from disuse is eliminated.

End Results.

It is now twenty years since my first tarsectomy. For the last three and a half years I have done the operation for relapsed club-foot exactly as described above. I have operated in all upon thirty patients, in some cases on both feet. There have been no accidents and all of my patients have been perfectly

satisfied with the result. Three of the feet have relapsed and I was obliged to do a secondary operation. This, I believe, was because I failed to take out a sufficiently large wedge of bone in the first place. One of the feet had to have a secondary operation because I failed to sufficiently rotate the anterior portion of the foot and a sharp point of bone projected toward the sole of the foot. In one of the feet I took out too large a wedge of bone and the patient now suffers from moderate pronation and flat-foot. All of the patients are cured and all have practically perfect functional use of their feet.

I have two or three patients who are doing well but who, I believe, will ultimately relapse and require a secondary operation. This is easily done by opening the old scar and removing a little more bone. They are young children and their parents had so little trouble with the first operation and are so thoroughly sick and tired of shoes and braces that they are quite ready to let me operate again.

DISCUSSION

DR. J. F. O'BRIEN (Hartford): *Mr. President:* I consider it a privilege to discuss Dr. Cook's paper. We have a great many cases of congenital club-foot that have been neglected in childhood. Heretofore they have been indifferently treated, with the result that there are many relapses. I think Dr. Cook is rather modest about giving credit to himself, because it is due to his efforts that this operation has been standardized. It is now called the Cook operation and I know that Dr. Gibney and Dr. Whitman consider it the operation of choice. In my experience I have always treated these cases with plaster of Paris after the operation but I consider his brace an improvement as a retentive apparatus in walking. If these children were all taken care of in childhood and if treatment were begun within the second week of life, surgical treatment would not be necessary. They can all be cured and many times the lack of treatment is due to the neglect of parents.

DR. CARMALT (New Haven): There is nothing to be said in adverse criticism of this operation and treatment; its merits are both theoretical and practical but Dr. Cook and Dr. O'Brien each spoke of these cases being all the result of neglect, and I agree with them entirely. They should never have been allowed to get to the stage depicted in Dr. Cook's illustration, and would not, if the profession were alive to what may be

accomplished in very early life. Dr. O'Brien made use of the expression "to begin treatment within the first two or three weeks"—why wait so long? When I was in practice I was called in consultation a few times, and I emphasize a very few times, by the attending physician immediately after birth; the next day after the accouchement, and in every case that persistent treatment was carried out good was accomplished. To this end two factors are imperative:

1. An intelligent trained nurse or nurses.

2. A mother willing to supplement the work of the nurse, making permanent the endeavors of the surgeon to correct the intrauterine forces. The first few weeks of extra uterine life are the most important in this combat; at this time the bones are, so to speak, soft, and it takes but little force to mould them into their proper shape. This can be best done, at first, by the hands of the nurse; any plaster or bandage is liable to injure the extremely soft and delicate skin of the infant, causing the child to worry and cry. If the nurse will grasp the distorted foot around the heel and instep with her full hand and press firmly and steadily upon the inside of head of the great toe, i. e., at the tarso-phalangeal joint, she will then be employing the same forces Dr. Cook has shown to be necessary with his brace; and if employed at this formative period of the bones it can be done at less cost of time and force than if one waits for the two or three weeks that Dr. O'Brien mentions, and infinitely less than the months and years required if one waits for the time when the deformity has become confirmed, as in the cases requiring Dr. Cook's operation and brace.

This must be done, however, constantly, sleeping and waking, just as later Dr. Cook's brace is applied, and while this may appear to be onerous, the light is well worth the candle. Just think what is this month's light work compared with the distress of mind, in the first place, of the parents seeing this deformity before their eyes all the time, and the subsequent care and expense of operative interference.

One may say, Mr. President, that I am not speaking to the matter of Dr. Cook's paper. He refers to correcting the confirmed deformity; I am speaking of preventing it from becoming confirmed and exaggerated, so that, while not strictly germane to the immediate subject of the paper, it has its place in correcting the deformity at its earliest accessibility, and so far as that goes the two methods are identical. The mechanical principle of each is the same, but he, through neglect of others, is obliged to tackle the problem at a much more difficult, more complicated stage. At the stage I now advocate treatment the mechanical problem is relatively simple, but it requires understanding and persistence, though much less force. I have seen a marked change take place in a week's time and in one the deformity was almost corrected at the end of a month when the nurse left. The treatment by holding the foot with the

hand may be supplemented *at intervals* by the use of adhesive plaster; this, however, requires great caution and only the old-fashioned moleskin lead plaster should be used, as the Z. O. and other rubber plasters of modern make are sure to irritate and perhaps blister the skin. But even this again requires looking after frequently, daily, and readjusted.

It isn't practicable in a few words at this time to discuss how to apply the plaster; the application must follow the principles indicated by Dr. Cook.

DR. HENZE (New Haven): *Mr. President and Gentlemen:* Intrauterine pressure is undoubtedly an important etiological factor in club-feet. In the Munich clinic scars were constantly looked for and frequently found upon the dorsal aspect of the deformed feet, these being after the nature of a healed decubitus. In order to remodel the foot it is not only necessary to twist and stretch the ligamentous tissues, but the foot must be kept in an over-corrected position until the deformed tarsal bones have changed their shape. Coincidentally with this the ligaments and tendons adapt themselves to the new conditions. The ability of the patient to voluntarily over-correct the original deformity by pulling taut the tendon of the extensor digitorum longus muscle (producing dorsal flexion and valgus) is a fairly reliable test that these changes have taken place. Many failures are undoubtedly due to the fact that the surgeon does not continue the treatment long enough. Two years should be the minimum time for the patient to be kept under observation. At the last meeting of the orthopedic section at the New York Academy of Medicine, it was shown by Barnett and Zadek that dorsal flexion is frequently impossible without division of the posterior ligaments of the foot in addition to the usual tenotomy of the Achilles tendon. Radiographs taken before and after the division of these ligaments clearly prove the contention of the authors.

DR. E. H. ARNOLD (New Haven): Listening to Dr. Cook's calm and dispassionate statement about club-foot and its treatment, strikes me like the discussion on English spelling simplified, for a club-foot is much like English spelling. I am afraid it is not quite as simple a matter as Dr. Cook would lead you to think. I have not seen any of Dr. Cook's cases eight or nine years after the operation but have no doubt that he has succeeded in curing them all and that they will show up well at that particular time.

I have in mind some of my own cases, however, which did not do quite as well and about the relapse of which I felt quite sore at the time some of them relapsed because they did not follow out treatment. As Dr. Cook says, they are apt to wander from one to the other for treatment. However, occasionally some balm comes to my soul when I see

in the New York clinics, some of the best orthopedic men demonstrating cases that they have been treating for twelve years and more and they have had any number of relapses.

I can't quite agree with Dr. Cook's representation of the simplicity of the etiology of congenital club-foot. Not all cases are due to intra-uterine pressure, or to lack of amniotic fluid or multiple pregnancy. There are undoubtedly cases of hereditary club-foot. I have had some cases where the deformity ran in the family at least three generations and where it was transmitted through the paternal side, cases in which there was no deformed pelvis of the mother, no lack of amniotic fluid and no multiple pregnancy to explain the deformity. In these cases the tendency to deform is transmitted through the embryonic germ plasm. There seems to be a difference in the rate of length growth between soft structures and bone. Wherefore these cases, with the best of treatment, whether manipulation, brace or operation, will relapse as long as length growth persists. Only with the cessation of length growth is one sure of no relapsing. Conservative measures for these cases are, of course, indicated.

Dr. Cook's brace is such a conservative measure. Its principle and simplicity appeals very much to me. It may well serve to cure cases such as Dr. Cook described and it may control the hereditary cases. In these hereditary cases, the ligaments are often, however, much involved, even primarily. They are always involved secondarily, of course, and division of them may have to be resorted to.

Dr. Hoke of Atlanta, Ga., has devised an operation for re-rotation of the metatarsal and phalange bones by doing osteotomy on the metatarsals and then rotating them back.

DR. COOK (Hartford): I am very much obliged to all the gentlemen who discussed the paper. I am afraid I was not entirely clear. I don't want to give you the impression that I cure all the patients who come to me. I don't. Sometimes it is my fault and sometimes it isn't.

I agree with what the gentlemen said about keeping the patients under observation for three years. About the defect in the embryo I quoted almost literally from the book of Henry Ling Taylor and I agree with Dr. Taylor.

In regard to Dr. Carmalt, what he said I am particularly grateful for. A great deal can be done the first day of the child's life.

About the bone-cutting operation for relapsed club-foot, it is only done after all other means have failed. It is entirely different from all the other operations. If you take out a big enough wedge and put the bones together a relapse is impossible, because every step they take everts the foot more. Some of my cases have relapsed because I didn't take out enough wedge. Those that have relapsed I have operated on again and taken out a still larger wedge and they stayed cured.

Early Diagnosis of General Paresis.

C. FLOYD HAVILAND, M.D., MIDDLETOWN.

The early diagnosis of general paresis is of importance both to the patient and the community. Still to be regarded as an essentially chronic and fatal disease, nevertheless, recent work justifies a certain amount of hope that the ravages of the paretic process may be stayed, at least for a time, if the disease be early diagnosed and treated. Certain it is that lacking early diagnosis and early treatment, the prognosis is absolutely bad, and the patient loses even the slight chance of permanent arrestation of the disease process.

But early diagnosis is also of importance to the community, that thus there may be prevented the economic loss, resulting from the frequent business entanglements which so often occur when unrecognized paretics continue unrestrained their usual activities. A notable instance occurred some years ago, when a well-known railroad found its credit severely taxed through the imprudent and reckless schemes of one of the higher officials, who was only recognized as a paretic after the damage had been done.

Not infrequently paretics are admitted to the state hospitals as public patients, who were in comfortable financial circumstances prior to the onset of the disease, but who have dissipated their possessions before their condition has been recognized.

But the danger of unrecognized paresis from the community standpoint is not only possible property damage, but also personal damage. The investigation of a certain railroad accident showed the engineer to have been grossly negligent in disregarding signals, and it was only then found he was a beginning paretic. A New York policeman, who had been on duty up to ten days prior to his admission to the hospital as a case of paresis, was only discovered to be abnormal when brought up on charges for making an unjustifiable and brutal arrest. It is well known that the assailant of former Mayor Gaynor of New York proved

to be in the early stages of paresis, which was only recognized after he had been placed in prison. Such incidents are not uncommon, and emphasize the importance to the community of early diagnosis.

Of course not all such cases come under medical observation prior to the commission of some anti-social act, but that such acts occur as the result of the disordered conduct resulting from paresis, renders necessary the differentiation of paresis in all indefinite nervous and mental states which do come to the attention of the practitioner, for as a simulator of other nervous conditions, and particularly of other mental conditions, paresis has no rival. The location, extent and character of the paretic process may be such as to produce almost any physical symptom ever manifested in disease of the nervous system, while the mental symptom complex, at least in the early stages of the disease, lacks characteristic features.

As a disease involving both mind and body, paresis is a morbid connecting link between the brain as the material basis of mind and the immaterial world of psychic phenomena. Physical and psychical symptoms go hand in hand, although the relative prominence of either train of symptoms varies greatly in different cases, and even in the same case at different times. However, numerous observers have been impressed during recent years with the apparent increase of cases presenting definite physical symptoms, with relatively few and slight mental symptoms. But such increase is probably more apparent than real, merely indicating that now with laboratory aids to diagnosis fewer cases are unrecognized than formerly.

In making an early differential diagnosis of paresis the question of luetic infection is of course of prime importance. Since Krafft-Ebing's epigrammatic statement that syphilisation and civilization were responsible for paresis, the *spirochaeta pallida* has been discovered, and in 1913 Noguchi and Moore found it in the brains of paretics, a finding which has since been confirmed by numerous other observers. The *spirochaetae* have also been found in the paretic cord, and there are now practically none who deny the truth of Kraepelin's statement that, "We can

to-day declare with the greatest certainty that syphilitic infection is necessary for the later appearance of paresis." Paresis must be regarded as one of that group of diseases formerly mis-termed parasyphilitic, but which we now know are direct manifestations of late syphilis, a fact justifying the hope that more definite results may eventually be obtained from the work now being done along the line of therapeusis.

The mental symptoms of the beginning paretic are so varied and so changeable that alone, they afford little basis for a diagnosis. A change in disposition or character, or an irritable, faultfinding, quarrelsome attitude may be the only early deviations, but soon the results of a general blunting of ethical sense are revealed, together with impaired judgment. A man formerly temperate, begins to drink, obligations are neglected, the tidy person becomes careless in dress, disreputable acquaintances are sought, unaccountable mistakes are made in business, or business is neglected. Some cases are hypochondriacal and depressed, while others are sanguine, over-cheerful and express a sense of well-being, although the classical grandiose state of fully developed paresis is absent in fully half the paretics admitted to our hospitals, regardless of the duration of disease. In many cases the early mental symptom to attract attention is increasing forgetfulness, and of course some evidence of intellectual reduction soon appears in practically all cases. Intellectual deterioration in a young or middle-aged person means paresis must be considered in making a differential diagnosis.

While the beginning paretic may express visionary and impracticable plans and schemes, definite delusions rarely appear in the early course of the disorder, and there are none of the early mental symptoms which may not appear in other mental diseases, and even later, the mental syndrome not infrequently simulates such characteristic reactions as manic-depressive psychosis, either of the manic or depressed type, dementia praecox or involutional melancholia. The early mental symptoms serve to attract the attention of friends, through whom medical advice is sought, but the physician can only regard mental symptoms as such, as suspicious signs, which require confirmation through physical examination and laboratory tests.

Some of the earliest physical evidences are to be found in the physiognomy, which reveals more or less permanent physical change. There is an asymmetrical lack of muscular and dermal tone, a lack of expression, due to the loss of normal intellectual stimulation, often a slight drooping of the lower jaw, and as the disease progresses, a tendency to roundness, with an ironing out of the facial folds. When the facial muscles are put into motion, there is found to be a greater or lesser lack of proper coördination. Often a fine, fibrillary tremor in the upper eyelids may be obtained on easy closure of the eyes, while in a certain number of cases a slight clonus of the upper lip on retraction will prove to be as nearly pathognomonic as any early clinical symptom. Tremor of the tongue is rarely absent, and tremor is likewise to be found in the extended hand, its fine, fibrillary character serving to distinguish it from the coarser tremors associated with alcoholism. Any or all of these symptoms may be present together, or they may be more or less transitory, but the average case will present one or more of them at any one time.

The knee jerk may be either increased or diminished, but it is of more significance if increased. Not infrequently the arc subtended by the foot is regarded as measuring the condition of the reflex, but the degree of contraction of the quadriceps can only be accurately determined by placing one hand upon the muscle, as the arc of the foot movement may be altered by the tonic state of the muscle at rest. There may be a violent contracture of the muscle, with but little response in the foot.

Speech symptoms are usually of later development, and when present are characteristic confirmatory diagnostic links, but even in the early stages test words and phrases may bring out a slight catching or sticking, which is fully as characteristic as the typical slurring of fully developed paresis.

In a certain number of paretics, the pupils remain normal in every respect up to a late stage of the disease, but the majority of cases early manifest an absence of the pupillary dilatation normally found on irritation of the skin of the neck or temple. There is usually an early limitation in the range of pupillary movement in response to light, while irregularity of pupillary outline and unequal pupils are frequently early symptoms. But

definite myotic and Argyll-Robertson pupils are rarely found in early paresis, significant as they are in the later stages. Even such pupillary abnormalities as are early found in some cases, are not to be regarded as having significance without taking into account the physiological pupillary variations,—for instance, the sensory reflex on skin irritation is best marked in early life, and it normally becomes less active with advancing years, until it is often entirely absent in late life, while age also modifies range of pupillary reaction and character of pupillary outline. Even in middle life the normal roundness of the pupils seen in youth may change to a certain degree of irregularity, while inequality of the pupils is too common to have much pathological significance, except as a link in the chain of symptoms. Not only must physiological pupillary variations be kept in mind, but the fact that so many pathological conditions other than paresis produce pupillary symptoms, renders it all the more necessary to put no undue weight upon symptoms which can only be correctly interpreted, when placed in relation with all other symptoms presented. The same caution must of course be observed in considering any of the early physical symptoms, it being the association of a suspicious group of such symptoms with a sufficient group of mental symptoms which is of diagnostic importance, and not the occurrence of a few isolated symptoms, either mental or physical, which alone cannot support the diagnosis of paresis.

It is thus not surprising that numerous cases occur in which early diagnosis is extremely difficult and sometimes impossible, especially when dependence is placed upon mental and physical examination alone. But fortunately we now have the aid of the laboratory to clear up doubtful cases, and as a result there is no doubt early diagnoses are now made more accurately than ever before.

The examination of the spinal fluid should be regarded as a routine procedure in all suspected cases, particularly with a positive blood Wassermann, although, as is well known, the absence of the latter signifies nothing. But long before the Wassermann test, a cell count of the spinal fluid after lumbar

puncture was used to determine the presence of a pleocytosis. The differential cell count as developed by Alzheimer is regarded as determining in large measure the character of the process, producing an increase of cellular elements. If more than ten cells are counted to the cubic millimeter the finding is positive for paresis, if between five and ten cells, it is doubtful, and if less than five cells are counted, paresis may almost certainly be excluded.

Noguchi's butyric acid test for protein content of the fluid followed the cell count as a diagnostic aid, and then came the Wassermann reaction, which is almost invariably positive in the fluid, even if negative in the blood serum. Practically all observers report a higher percentage of positive fluids than positive serums, and some claim one hundred per cent of the former. Even in the relatively few paretics with negative Wassermann in the fluid, there is reason to believe repeated tests would alter the finding, and unless all other tests are negative, repeated Wassermanns should be done on the fluid when the first result is negative.

The most recently developed and most important laboratory aid to the early diagnosis of paresis is the colloidal gold precipitation test of the spinal fluid. It has been found that the abnormal amount of globulin present in the fluid of all paretics, causes gold precipitation within certain well-defined dilution limits, and there has thus been developed the so-called paretic curve, manifested in a series of varying dilutions, which is the most characteristic and most definite of laboratory findings in all cases of paresis. Less characteristic is the test in other forms of neurosyphilis, although even in other forms the order of dilutions in which precipitation occurs is not without significance. However, a positive paretic colloidal gold reaction is now regarded by most observers as definite and conclusive evidence.

The routine use of the various laboratory tests mentioned, renders it practically impossible to make an error in differentiating cerebro-spinal syphilis of some form from non-specific disorders. With the question determined as to the specific character of the disease, the differentiation is then of course between

paresis as parenchymatous brain syphilis and the vascular, meningeal and gummatous forms, a differentiation of the greatest importance from a prognostic and therapeutic standpoint. The greatest single differential point is the characteristic paretic curve of the colloidal gold test, although as mentioned, the other forms of cerebro-spinal syphilis give an early significant order of reduction as regards dilutions, which is quite different from the paretic order. As already stated, a cell count of ten or more to the cubic millimeter is almost invariably due to paresis, while a less degree of pleocytosis may be due not only to other forms of cerebro-spinal syphilis, but non-specific brain tumors. The mere presence of globulin and of course a Wassermann reaction in the fluid cannot be used as differential points, and are only to be considered in connection with other findings.

Aside from a few cases which develop paresis and some one of the various types of mesoblastic brain syphilis, at the same time, there are few cases of paresis which cannot be early diagnosed if there be a correlation of mental symptoms, physical symptoms and laboratory findings, and when error is made it is almost invariably found that at least one of the three fields of investigation open to us has not been thoroughly explored. Too often is a negative blood Wassermann regarded as sufficient reason for failure to make a lumbar puncture, which should always be made when mental or physical symptoms are at all suspicious.

In conclusion, it should be emphasized that the early diagnosis of paresis is in the hands of the general practitioner, as comparatively few paretics are committed to the state hospitals until the disease has become well marked, and when such extensive cerebral destruction has occurred as to preclude the possibility of improvement. And that paresis is not a disease rarely encountered is shown by the figures prepared in 1913, by Dr. Salmon of the National Committee for Mental Hygiene. After pointing out certain evidence indicating that the recognized cases of paresis fall short of the actual number, he showed that regardless of actual prevalence, the disease was recognized as the cause of death in approximately the same number of cases as died

from typhoid fever in the State of New York during that year. The paretic deaths exceeded those occurring from all forms of meningitis and from cancer of the breast, and were double those occurring from homicide, which so frequently stirs public interest as a pressing social problem. It is thus evident that paresis is a serious menace to society, and every effort should be made toward early diagnosis.

DISCUSSION.

DR. WHITEFIELD N. THOMPSON (Hartford): Dr. Haviland's plea for early diagnosis of general paresis has not been too earnestly drawn. It is, of course, true of any form of mental trouble that prompt diagnosis may be of advantage both to the patient and to the community, but in paresis it is essential as the only hope for the patient.

Hitherto, as has been stated, a diagnosis of paresis meant that the patient was doomed, and it is no less true now than formerly if the nature of the disease is not determined before there has been any considerable progress of inflammatory change involving the brain tissue. This condition has, as a rule, already been reached when the patient's reactions to delusions determine the necessity of commitment to an institution for the insane. When a patient is found who exhibits a considerable degree of departure from normal conduct which is marked by evident mental reduction, particularly in the field of judgment, and when that patient shows such physical symptoms as tremor at the angles of the mouth, active knee jerks, and immobile pupils, with perhaps slight slurring speech, a critical examination should be pursued. Time is very precious, and it will not do for the family physician to await developments. The patient should have hospital care and oversight, and the measures that Dr. Haviland has mentioned to determine a positive diagnosis should be employed without delay.

The favorable results that have been obtained in the treatment of paresis by a specially appointed commission in Massachusetts have been made possible by the work of the Psychopathic Hospital. The comment has been made that patients would voluntarily go to this hospital when they were not acceptable at the general hospitals and when the services of a State hospital were not acceptable to the friends or the patient. Cases are referred to the Psychopathic Hospital on the first suggestion or suspicion of mental or nervous trouble, and in that way the diagnosis may be confirmed before much mischief has been wrought.

In this State no special provision has been made for the care of early or incipient mental cases, that is, of the indigent class. The act passed by the last legislature permitting patients to be received in hospitals and sanatoria devoted to the care of the insane, for a period of ten days for

observation, will meet a need for cases that are not committable, but there are many for whom even this care will not be available. There seems to be only one way of meeting the needs of a very large class of individuals, who, though on the verge of serious illness, are not permitted the hospital care of patients who have even the most trivial physical disorders. If general hospitals were equipped with special wards for nervous and mental cases, to be under the care of nurses and physicians qualified for the work, as much would be accomplished as in any department, and that with very little of the objection that is now urged against the so-called psychopathic wards. The reasons that have been advanced against the establishment of such wards are sentimental and have been greatly overdrawn, with the result that hospital care has been unfairly restricted. The Connecticut Society of Mental Hygiene and a few local medical societies have endeavored to conduct clinics for mental cases, but as yet they barely touch the broad needs of the State.

Three cases under care at the Retreat, all well advanced and with well developed symptoms, have within the past year been given the intensive salvarsan treatment—that is, two intravenous injections of .6 gram doses twice weekly—without apparently altering the course of the malady in any respect, unless possibly one person died more promptly for having had the treatment. Failure to effect any change prompted discontinuance of treatment in the other cases.

What the presence of paretics in the community may mean is shown by two other cases. One, a mail clerk, was regarded as simply nervous and irritable. He was not under physician's care, and the first evidence of marked impairment of judgment was when his family was notified that a car-load of furniture had been received from another city, when it developed that he thought he saw an opportunity to make a large profit on his deal. The man was brought to the Retreat for observation, he remained under care for a few days, the family questioned if they had done the right thing, and he was removed against advice, a tentative diagnosis of paresis having been made, and this was before the day of any of the tests mentioned by Dr. Haviland. A committee from the lodge of which he was a member called to see him, and they were met at the door with the threat that they would be shot if they did not keep away from the house. It transpired that he had delusions with respect to his wife.

Another case, that of a railway engineer in the west, reached the point where he appeared to believe that he had the entire system to himself, and he ran his train accordingly and in utter disregard of signals until he came to grief.

There is apparently a great deal of suffering and economic wastage on account of the lack of proper facilities for giving mental cases care in the pre-hospital stage. The efforts of this Society may well be directed

toward carrying out a plan that has been urged by Dr. Hallock for several years, for an institution for neurasthenics of the indigent class and for suitable hospital provisions for those in the early stages of mental illness.

DR. STOLL (Hartford): Some of the foremost syphilologists in the country have made the statement that before a man is discharged as cured he should have a spinal fluid examination. Unquestionably that should be the routine in all the so-called "Wassermann fast" cases; i. e., the patients whose serum reaction remains positive after intensive treatment; also when headache continues in spite of active treatment. A case who has had four or five or six injections of salvarsan, and still has a four plus Wassermann almost surely has the trouble in the nervous system.

We had two cases recently who showed this. One, a girl, who had not responded to many intravenous injections was found to have a positive spinal fluid. Another case, a tabetic with optic atrophy who was "Wassermann fast" gave a typical paretic curve, though entirely free from mental symptoms. A woman with spinal syphilis, also without cerebral symptoms, had a paretic curve.

Apparently these cases are really beginning paresis without symptoms. Two similar cases came to autopsy at Johns Hopkins. Both had a positive paretic curve but no symptoms of paresis, yet at autopsy both showed the typical picture of paresis. So we must realize we may get the paretic gold curve before we get the typical symptoms.

In regard to the children, I think we owe a very distinct duty to the wives and children of paretics. Paresis is syphilis, and the man who has syphilis usually has infected his wife and if she is not sterile she will usually bear syphilitic children. And the man does not do his whole duty, be he in an institution or in general practice, who when he finds a case of paresis, does not have the man's wife and children examined also.

DR. MAILHOUSE (New Haven): The early diagnosis of paresis depends upon the family observation and, perhaps earlier than that, upon the observation of the employer. It seems to me, and it has been my experience, that the employer or the boss or the man over the individual is the one who is first able to note the change in judgment and the change in character and the change in efficiency of the patient. The family is very apt to overlook the neurotic or neurasthenic manifestations which are so common in the beginning of paresis, and it is up to the general practitioner too to make a close observation and examination of these individuals who come in with neurasthenic symptoms. These are very often the early phenomena; many of the early phenomena are symptoms of depression.

Many a paretic comes to the practitioner or the specialist with symptoms of depression. He complains of nervousness, has some feeling that

something is wrong and it is very important that he be gone into carefully; and if you observe these phenomena carefully, generally two or more can be found. Loss of efficiency is often the first thing to attract attention. He himself observes that his attention is failing; he is unable to concentrate, and the boss finds that he is becoming lax, and these are many of the phenomena that he will first call attention to. When he comes to the doctor he repeats and repeats, goes over and over some of his unpleasant symptoms. These come in neurasthenic and psychopathic conditions, but these are the phenomena that should call the attention of the general practitioner to this disease. Epilepsy and apoplexy occurring between the years of 30 and 40 should create suspicion of paresis. Delusion of grandeur which was formerly and is still described in the books is rather unique in the early periods of paresis. I believe that delusions of grandeur are rather late and the impaired judgment is perhaps rather more commonly an early symptom, and that moral lapses also are not so common early in the disease. The early phenomena, the early symptoms, are the ones that should excite suspicion and that is where the need of a careful examination comes in. Changes in habits are more common than moral lapses, I should say. The loss of neatness in dress and of neatness in eating are perhaps much more common than the other conditions described.

Among the physical phenomena in addition to the tremor of the tongue, I have noted very frequently that the patient is unable to hold the tongue protruding owing to an incoördination in the muscles involved; and he constantly draws it backward and forward, the resultant being a backward movement. Of course the fine tremor is visible but we see that in so many other debilitated states that I consider it less characteristic.

DR. F. H. BARNES (Stamford): *Mr. President and Gentlemen:* I want to thank Dr. Haviland for his very fine paper.

Relative to what might be termed the neurasthenic stage of paresis, the neurasthenic stage so-called but nevertheless we are bound to have it; the term which is applicable not only to cases of general paresis, but also to cerebro spinal syphilis, tabes dorsalis and other diseases. It is a stage we are too prone to overlook. If we find the usual symptoms after careful examination and find no organic lesions of the bodily organs it is certainly up to us to have Wassermann or spinal cord tests made.

As far as the incarceration of such patients it is rather difficult especially during this stage. I saw a case recently, a man who became very irritable, very forgetful and it was very difficult for his family to live with him. He found fault with all those about him and was extremely ugly and vicious with his wife and children. These were the only symptoms that he gave. Suddenly he had a seizure, epileptiform in character, and after that developed the typical signs of paresis.

Another case I remember showed the sexual element. The man was apparently normal but he did queer things in a sexual way. The sexual idea was in his mind continually and he showed so many sexual inversions and perversions that the family suspecting his mental state had him put under observation. Later he proved to be a clear case of paresis.

This talk of adding psychopathic wards to general hospitals is not practical in my estimation. I notice that in certain hospitals I am associated with, when patients show a few signs of mental derangement they want them removed immediately. It is most difficult to know just when such cases should be put under observation. I want to emphasize Dr. Haviland's suggestion that in the diagnosis of neurotic states to look out for the physical signs that later on are followed by all the marked symptoms of this disease.

DR. HAVILAND (Middletown): I am grateful to the gentlemen who discussed the paper, and who emphasized the importance of early diagnosis of general paresis. The points made by Dr. Mailhouse and Dr. Barnes are reinforced by the fact that in the majority of unrecognized cases of early paresis, the diagnosis of neurasthenia has been made, thus indicating the bewildering assemblage of indefinite nervous symptoms, which cause the case to be consigned to that diagnostic scrap basket, which holds so many carelessly, erroneously diagnosed nervous states. Such fact results from lack of definite characteristic features in the early stages, although, as Dr. Mailhouse has indicated, whatever symptom complex may be presented, there are always evidences of impaired judgment and loss of efficiency, which are usually the earliest significant symptoms to attract attention.

The point mentioned by Dr. Thompson regarding psychopathic wards is most important. At present, with a total lack of such wards in Connecticut, there is great need of psychopathic wards in general hospitals for the care and treatment of mental cases pending commitment. The need is possibly greater as regards mental cases other than cases of paresis, as in such cases the lack of early treatment may mean the difference between recovery and chronicity. In the vast majority of curable mental cases, the period pending commitment is one in which treatment is of the greatest value as regards the outcome. Over ninety per cent of manic-depressive cases recover if they receive immediate treatment, but such a percentage of recoveries is not obtained if treatment be deferred. In the absence of psychopathic wards, mere custodial care is alone available prior to commitment, which means that manic-depressive cases, considering but a single form of recoverable mental disease, are much more likely to lapse into so-called "chronic-mania." In Connecticut mental cases are consigned to almshouses and jails pending commitment, and it does seem a deplorable situation when one sees cases brought to the

state hospital, manacled with handcuffs and accompanied by police officers and jailers, who know and use only police methods in caring for the mentally sick.

The fear of psychopathic wards in general hospitals appears very largely to result from misapprehension. Such wards do not disorganize or interfere with other hospital activities, but actually supplement them, a fact which has been fully demonstrated wherever such wards have been established. A psychopathic ward has been in existence fifteen years in connection with the Albany General Hospital, with material benefit to both psychopathic ward and surgical and medical wards resulting from the association. A practical result of the greatest value is the diminished percentage of mental cases committed to the state hospital from the neighboring community. Cases are received at the psychopathic ward at the first appearance of mental symptoms, they receive prompt treatment, and in a considerable number of instances are able to return home without the unjust, but none the less real stigma of "insanity." Such a result is of the greatest benefit to the community, and greatly aids in the inculcation of the idea that mental disease is a medical problem, rather than some strange and ill-defined entity, generically termed insanity, with which medicine has little to do.

May I add a word in regard to Dr. Stoll's remarks? The matter of tracing up the families of the paretic, with regard to possible luetic infection, is of importance. No state hospital can be assumed to perform its full duty when there are no trained social workers associated with it for follow-up and after-care work. A hospital's activities should include extramural as well as intramural work. A hospital's work is but partially accomplished unless it reaches out into the community, as only thus can it participate in that most important work of all—prophylaxis.

The Differential Diagnosis and Treatment of Some of the Rarer Urological Conditions.

THOMAS N. HEPBURN, M.D., HARTFORD.

My excuse for appearing before you to-day is not that I have a formal paper which treats of any single urological condition but to present to you a few pictures of some cases involving urological surgical problems which have been more or less unusual. My hope is that in presenting to you these problems you will be stimulated to discussion and to the avoidance of some of my mistakes.

The first picture which I will show represents what may be called a case of bilateral renal pelvic calcified casts. This is the picture of a married woman, twenty-eight years of age, who came in complaining of dysuria and pain in her back dating from the birth of her baby six months previously. Four years previously she had had her appendix removed and five months previously she had had a complete hysterectomy done with excision of ovaries and tubes. She had pussy urine and cystoscopy showed mild chronic cystitis. Both ureteral ossii were normal in appearance and in no way suggested that any inflammatory material was coming down from the kidneys. At my first cystoscopy I was unable to catheterize either ureter because of the bladder spasm; therefore I did a chromoscopy with indigo carmine. This was ejected from each kidney in twelve minutes and in excellent density. Judging from this test the function of the kidneys is nearly normal and equal. The x-ray picture then taken showed the pathology as you see it here on the screen (Slide I). The clinical picture was therefore that of a woman without fever, with fairly normally functioning kidneys as judged by the indigo carmine test but with a mildly annoying cystitis and pain in the back. We decided to remove the left calculus first. The left kidney was easily exposed and the cortex was apparently normal. The calculus could easily be felt and

we made a wide incision into the pelvis of the kidney. The stone was very brittle and we took it out in piecemeal, putting our fingers into all the calices and apparently removing every piece of the calculus. The patient had a somewhat stormy convalescence and before leaving the hospital we took this picture (Slide II) of her which shows that we were not successful in removing the whole calculus. The patient was advised to return after she had recuperated from the operation. She returned on March 28 of this year on another surgeon's service. At that time her general condition was considerably improved, although she still complained of pain in each kidney region. I cystoscoped her again and this time was successful in catheterizing both ureters and did a differential renal function with phenolsulphonephthalein. The right kidney excreted pussy urine and the left kidney excreted quite clear urine rapidly. The left kidney excreted the phthalein in six minutes and in fifteen minutes six per cent. The right kidney excreted it in eleven minutes and in fifteen minutes two per cent. There was no bladder leakage. The functional capacity, judging from this function with phthalein, of the left kidney had been improved by the removal of the large calculus in spite of the fact that fragments had been left. Therefore, I advised operation on the right kidney. Trying to improve on our technique of the first operation which resulted in the leaving of some of the stone, the kidney was split open in Broedles Line from pole to pole and the calculus was removed very carefully in an attempt to get it out without any crumbling. However, this was impossible in those calices not in the plane of the incision. From them the calculus had to be taken in piecemeal. It seemed as if the stone was absolutely thoroughly removed. The patient had again a rather stormy convalescence but left the hospital in fairly good condition. This picture (Slide III) taken before she left revealed that some of the fragments of the stone on this side were left.

Now this patient represents a surgical condition, the solution of which I feel is not absolutely clear. I think that most surgeons feel that small calculi lying loose in the pelvis or calices of a kidney have a greater potentiality for danger through their ability

to move and cause obstructions than a single large calculus in the pelvis or calyx which is rather thoroughly anchored and is not doing much damage to the renal function. While most of you may doubtless feel critical about our failure to get out these stones at the first operation, I can assure you that the work was done with very great care and no pains were spared in the attempt to remove the stone completely. As judged by one function test the removal of the stone from the left kidney somewhat improved the function of that kidney as compared to the right. Yet taking this patient's pathological danger now as compared with before either operation, I do not feel at all sure that we have improved her chance of life.

The next case which I wish to show you was to me very interesting from a diagnostic point of view, and illustrates how easy it is to overlook the complete pathological picture of a case in our enthusiasm over having discovered a somewhat unusual condition. This man came to the hospital with a probable diagnosis of tumor of the sigmoid. The x-ray picture was taken and showed the picture (Slide IV) you see here of a large shadow in the skeletal pelvis somewhat above and to the left of the bladder. When first seen several surgeons thought it was a large bladder calculus. However, this was easily ruled out by the following procedure in which I injected with a urethral catheter argyrol into the bladder and x-rayed him, showing (Slide V) that the large shadow is entirely outside of the bladder nor is it connected with the bladder as might be the case were it a stone in a diverticulum. I then cystoscoped the patient and found the bladder normal and both ureteral orifices normal. I catheterized both ureters and the urine was sent to the laboratory where sedimental and cultural examinations showed it to be normal. The renal function was done with phenolsulphonephthalein and excretion was perfectly normal. The x-ray was taken with catheters in situ and you see (Slide VI) how the catheter to the left kidney goes right to the stone which is obviously too large to be in the ureter; therefore, a diagnosis of ectopic kidney was made and the patient was operated on by Dr. O. C. Smith, the stone being removed and the patient making an uneventful recovery. One year later

I received a telephone call from Dr. Edward O. Smith of Meriden, the family's physician, stating that this patient had a large stone in the right kidney. I was very much surprised and on looking up my x-ray plates found that the area of the right kidney had been omitted from our plates. The patient came up to Hartford and I had the opportunity of cystoscopying him again and got an x-ray picture with the catheters in situ as shown by this plate (Slide VII). Again the urine from each kidney was perfectly normal and the kidneys were each functioning perfectly normally as shown by the intravenous function test. This stone was very successfully removed by Dr. Smith of Meriden and the patient, I understand, is perfectly well. Here we have not only a congenital abnormality as represented by an ectopic kidney but a condition of large bilateral renal calculus of a totally different type from that shown in the last picture. These calculi were absolutely immobile. They did not extend at all into the calices. They were causing no damage to the renal function or to the mucosa as shown by the absence of blood or pus in the urinary findings. This type of stone apparently causes trouble purely as a large non-infectious foreign body would through its mechanical action without any infection. They are very easily removed without any probable danger of leaving pieces in the kidney. I feel that this surgical problem is quite clear and totally different from that shown in the previous case. The case before you illustrates markedly the fact that if you find a pathological condition in one kidney be sure that you are not overlooking something in the other kidney by an incomplete x-ray.

The next picture is that of a young woman, nineteen years old, who complained of sudden and acute pain, of four days' duration, in the right ureteral region, about level with the brim of the pelvis. She gave a history of having passed a large quantity of water, after which the pain was relieved. An x-ray picture was taken and revealed two shadows in the right ureteral region (Slide VIII). The diagnosis by the patient's family physician and by the roentgenologist was that of ureteral calculi. I cystoscoped her and found the bladder perfectly normal and both ureteral orifices were normal and admitted No. 6 catheters. Urine

from the right kidney was normal and the differential renal function with the phthalein was normal. X-ray taken with catheters in situ showed this picture (Slide IX), in which you see one of the shadows is quite a distance from the ureter and the other apparently right in line with the ureter.

In spite of the fact that this young woman's attacks had simulated Dietl's crises, and a shadow lying in the region of the ureter, we made a diagnosis of calcified mesenteric lymph gland pressing on the ureter. An anterior incision was made and the glands were removed by Dr. McKnight. These I have put together in the position as found in the picture (Slide X). The patient made an uneventful recovery. The time elapsing since the operation has been too short to say what actual benefit the operation has done her.

This picture (Slide XI) represents a large shadow in the right abdominal region of a young woman complaining of pain in the appendix. The kidney was found to be normal by cystoscopy and differential renal function, and at operation a large calcified lymph gland was found in the mesentery. There were other groups of glands in the mesentery which had thrown no shadows. They were not all removed.

This picture represents a young girl, fifteen years old, with a pain in her appendicital region and her back. The x-ray revealed the condition as shown here (Slide XII), two small shadows in the right ureteral region but not tangent to the catheter. Cystoscopy and double ureteral catheterization showed the right kidney to be perfectly normal.

This patient has not yet been operated.

The problem presented by these three cases of mesenteric lymph adonitis which might easily be mistaken for appendicitis or ureteral or renal calculus is to me an interesting one, inasmuch as we have no definite picture of clinical symptoms, and without very careful work one might easily be misled to doing useless surgery either by removing the appendix or by exploring the ureter with negative findings. What the final result is of removing these glands surgically, I do not know. In the first case I feel very sure that surgical procedure was entirely justi-

fied. In the second case the gland was so large and heavy that it was certainly dragging on the mesentery and its removal was indicated. In the third case the glands are so small that I think general hygienic treatment is probably the wise course to pursue.

The next group of cases which I will show you is intended to present the problem of what kidneys should be removed and what kidneys should be left in, in cases of ureteral obstruction due to kinks. The first plate (Slide XIII) presents the simplest normal renal pelvis. The second picture (Slide XIV) also shows a normal pelvis of somewhat more complicated variety. The third one (Slide XV) shows the early changes the renal pelvis undergoes in case of ureteral kink causing obstruction. In such a case it is obvious that only surgery enough to relieve the kink is indicated. This picture (Slide XVI) shows a more advanced pelvic condition due to ureteral kink. She made a very good recovery after operation removing the obstruction, although she still has pus in her urine. The next picture (Slide XVII) shows a still more advanced hydronephrosis in which the function of the kidney was seriously damaged and it seemed wise to remove this kidney inasmuch as the other kidney had taken upon itself functional compensation. The next picture (Slide XVIII) shows the advanced stage of hydronephrosis in which the kidney is nothing but a shell and obviously should be removed.

The next picture (Slide XIX) shows one of the secondary complications of ureteral kink in hydronephrosis; that is, the deposit of multiple calculi in the dilated renal calices. It is evident that in cases of this variety the whole kidney should be removed if the other kidney is functioning at all well.

The next picture is represented as showing an unusually large bladder diverticulum. There are two graphic methods of showing a diverticulum. One is by injection into the bladder of a fluid throwing a shadow with the x-ray. This shows up very prettily in this picture (Slide XX) and shows the unusual situation of a diverticulum jutting off from a diverticulum. It is evident that with this method of illustration a small diverticulum behind the bladder would not show because it would be concealed by the bladder shadow. In such cases the second method of illustration

such as this (Slide XXI) is preferable. Here you see shadow-graph catheters curled up into the diverticuli shown in the previous picture. The next picture (Slide XXII) shows the same method of illustration in another case of bladder diverticulum in which catheters also are up the ureters. It illustrates the predilection of a diverticulum for the urethral area. This case is interesting because it presented the complication of a malignant papilloma growing out of the mouth of a diverticulum. This I removed by resecting the bladder wall with the diverticulum and the papilloma en masse. The specimen I pass around. With a catheter in the ureter I was able to get it off without resection of the ureter.

The next case is that of bilateral uretero-vesicular valvular incompetency as illustrated by this picture (Slide XXIII). It is a picture of a young woman who, following labor two years previously, had an acute cystitis as a result of catheterization. It rapidly grew so severe that she was unable to hold her water at all. For two years her bladder has been entirely incontinent; therefore, she had given up all hope of enjoying life and had been bedridden for eighteen months. I attempted to cystoscope her but could find practically no bladder cavity and the procedure was so exquisitely painful that I had to give it up. I attempted various methods of chemical antisepsis which only made the girl's life more miserable. The cystitis was apparently of colon bacillus variety. She seemed to be a good case for inoculation with bacillus bulgaris which I did and her pain was relieved in almost twenty-four hours. Inside of two weeks she could hold her water for ten minutes, and inside of two months she held her water for one-half hour. At that time I took the picture you see here (Slide XXIV) which shows the uretero-vesicular valves to be entirely incompetent, and that her urinary vesicle includes ureters and renal pelvis and calices. The bulgaris bacillus treatment was continued. I was now able to cystoscope her and to pass catheters up to each kidney and do a differential renal function, in which I found the kidneys to be functioning normally, and I injected the bulgaris bacillus up into each kidney pelvis. Three months after the beginning of the treatment the patient

was able to hold her water for two hours and had taken on fifty pounds in weight. She has been working in New Haven now for four months and last week came to me for examination at which time the bladder wall was practically normal and the urethral openings had almost closed down to normal. Radiographic fluid was injected into the bladder under double the pressure previously used and showed that the fluid leakage was greatly diminished (Slide XXV).

This case is especially interesting inasmuch as it presents the problem of ascending infection to the kidney as the result of uretero-vesicular valvular incompetency not due to obstruction to the outflow of the bladder at the urethra but resulting entirely from interstitial cystitis. The method of treatment is of course not original, but is new enough to make me anxious to hear from others here as to their success with it.

DISCUSSION.

DR. A. C. HEUBLEIN (Hartford): Dr. Hepburn's slides are very interesting to me for Dr. Hepburn and I did the work together on many of his earlier cases. These cases represent the result of constant painstaking effort on Dr. Hepburn's part and a very slight effort on my own part.

Pyelography is a most complicated procedure and yet it may become comparatively simple if the cystoscopist and radiographer combine their efforts. There are so many delicate steps in the entire procedure that if one part of the technique fails, the whole falls to the ground. Good team work is essential.

I am sure that Dr. Hepburn agrees with me that this work should be carried on in the hospital and not in an office.

It is perfectly obvious that stereoscopic negatives have a great advantage over the single plate, for the latter method may give the impression of a stone lying tangent to the skiagraph catheter when in reality it is a lymph node lying in front of or behind the catheter. If the apparatus for making stereoscopic radiographs is not available, we can frequently differentiate a urinary stone from a calcified lymph node by making two plates, one with a patient lying back to the plate, the other abdomen down. The greater distance the object radiographed is away from the plate, the larger the shadow, and vice versa.

One thing I want to emphasize and that is to ground the tube stand if one is doing the cystoscopic work on the radiographic table. In one of our earlier cases the patient and Dr. Hepburn both experienced a shock which

was disagreeable, spoiled our plate and paralyzed the patient's bladder sphincter for a few days.

I am convinced that ureteral kinks are very much more common than is generally conceded. The only way that we can recognize this condition is by the method shown here to-day. I feel that it should be resorted to more frequently than it is at present, in most communities.

DR. McKNIGHT (Hartford): I would like to say, Mr. President, that I find myself in a very peculiar and unusual position. Heretofore after Dr. Hepburn and Dr. Heublein have made their examinations and located the trouble I have had to do the work, but in the present instance they have left nothing for me to do. I wish, however, to express my great appreciation of the value of the work they have done in their special lines.

While I was sitting here in that frame of mind which a man usually is in when he knows he is going to be called upon to say something and has nothing to say, I was trying to recall an instance where they have located a stone in the urinary tract and I had failed to find it just where they said it was. I can't recall an instance, and I have operated on a number of cases that they have prepared for me. I will never forget one case where Dr. Heublein said there was a rather smooth oblong stone in the right kidney. It was a healthy looking kidney, looked perfectly normal. I couldn't feel that stone, and used all the means I knew of except opening the kidney, and I was about to give it up when I thought "If Heublein says it is there it is there," and finally succeeded in pressing it out into the pelvis, from which it was easily removed.

The case in which the doctor spoke about the calcified glands was very interesting. After I got them out I felt I wouldn't want to tackle many of those cases. These glands were surrounded by large veins which didn't show up when they were under pressure, and it was rather a piece of good luck than skill that we got them out without any accident.

I am not in the habit of advertising much but some of my friends do it for me, and perhaps I will close by reading this extract from the Hazardville correspondent of one of our Hartford papers. It speaks of a certain person who had been operated upon and says: "The stone the surgeon removed from the kidney was a peach stone which Miss —— swallowed years ago. It was perfect in shape."

DR. W. S. BARNES (New Haven): I think this proves to the members that urology is certainly a valuable aid to the surgeon. I do not know that Dr. Hepburn mentioned what he used as the material for injection. We have had reported cases in which there has been trouble from injecting the pelvis of the kidney with various silver salts. We have in a solution of thorium nitrate a very efficient preparation for demonstrating lesions along the urinary tract. I think that diverticuli of the bladder

occur quite frequently. I recently had a case of this kind under my care in which the lesion was situated similar to that reported by Dr. Hepburn. It was situated very close to the right ureter and had existed for many years. In fact this case had been operated upon by a prominent surgeon in New York City for an obstruction at the neck of the bladder, probably due to prostate, but the condition proved to be a diverticulum of the bladder.

DR. HEPBURN (Hartford): In regard to what radiographic fluid to use in pyelography, I started in with argyrol, 45%, and then collargol, but 15% thorium is, I think, the most valuable although personally I have never had trouble with any of them. I have been careful never to do pyelography where there was any sign of blood in the urine suggesting that the fluid might be forced into the circulation.

The Treatment of Ectopic Gestation Based on Results Obtained on the Gynecological Service of the Hartford Hospital.

CALVIN H. ELLIOTT, M.D., HARTFORD.

In presenting this paper, I wish to state at the outset that I do not claim anything new in theory or results from previous writers. All I wish to do is to add our little list of cases and conclusions in hopes that it may be of some value to the medical profession.

It is not in the scope of this paper to discuss the theories as to the causes of ectopic gestation, nor to discuss in detail the symptoms which are well known to all.

I was able to get partial records of some and complete records of others, of thirty-four cases with two deaths during the last five years on our service at the Hartford Hospital. This does not include the cases on the surgical and private divisions of the hospital. From these thirty-four cases, only twenty-seven records were found in such shape as to draw any conclusions.

The following is a summary of the analysis of my examination of the records:—

1. *Age of patient.*—Approximately 60% were between 20 and 30 years, 35% were between 30 and 40 years, 5% were 40 and over.

2. *Previous history.*—Approximately 60% were multiparous, 40% were primiparous.

3. Miscarriages had occurred in 9 out of 27 cases or 33%. Previous inflammatory diseases of pelvis were recorded in 4 cases or 15%.

Ectopic gestation in the opposite tube was recorded in 2 cases out of 34 or 5.9%.

Menstruation.—There was no menstrual disturbance in 4 cases or 15%.

Present Illness.—Dated from a few hours to 4½ months with an average of 3 weeks. *Abdominal pain* is the most frequent and impressive symptom. It occurred in 100% of the cases. The character was sudden and knife-like in 12 cases (44%), and “dull aching,” or general abdominal pain, in the remaining cases. Bloody vaginal discharge or irregular menstrua-

tion occurred in 23 cases (85%). Faintness occurred in 10 out of 24 cases recorded or 41.6%. Nausea and vomiting in 6 out of 24 or 25%.

Condition on Admission.—The temperature ranged from a slight fever in 12 cases out of 34 (35%), to sub-normal in 9 cases (26.4%). There was normal temperature in 38%. Shock was present in 9 cases (26.4%). 5 cases were severe, the remainder of varying lesser degrees. There were signs of ectopic gestation in 19 out of 27 cases or 70%.

Time of Operation.—Six were operated on at once, two of whom were in profound shock. These two were the only deaths recorded in the 34 cases. All the others were in the hospital from one to ten days before operation.

Operation.—Twenty-four patients were operated on by abdominal section; 3 cases by vaginal puncture and drainage. Of the 24 section cases recorded the right tube was involved in 10 cases, and the left in 14 cases. Tubal rupture occurred in 8 cases and abortion in 15. Intact tubal pregnancy in 1 case. The appendix was found involved in 4 cases and removed. The uterus was markedly retro displaced and suspended by Gilliam operation in 4 cases. Of the 3 cases recorded that had vaginal puncture and drainage, two developed rather high temperatures and had a stormy convalescence for a week and ten days respectively; both recovered, however. The other one, a broad ligament hematoma, drained out uneventfully.

I will now give a brief history, with treatment, of the five cases recorded that came to the hospital in condition of severe shock.

Case "A."—Mrs. I. O. Age 28. Admitted to hospital on stretcher 5:30 A. M. Patient complains of severe pain in abdomen and is in profound shock. Patient states she has had no menstrual period in two months but has had bloody vaginal discharge occasionally. About 8 P. M. yesterday she began to have severe cramp-like pains in lower abdomen, similar to labor pains. Pains continued all night and early this morning she began to get short of breath, was very weak and had great thirst with marked pressure symptoms in abdomen.

Physical examination.—Shows a large obese woman. Pale, lips blanched, rapid respiration, anxious expression on face, and very restless. Heart and lungs negative. Abdomen large, rigid, tender to touch, with dullness in both flanks on percussion. Pulse 160 and poor quality. On account of patient's history of growing worse, it was thought advisable to operate at once. Abdomen was opened, under ether anesthesia. A large quantity of blood and clots were removed. A ruptured right tubal pregnancy was found, and tube removed. Abdomen closed. Patient gradually grew worse in spite of treatment and died the next day.

Case "B."—Mrs. R. F. Age 38. Admitted to hospital in condition of shock. Last menstrual period three months ago. One month ago had a little bloody discharge. One week ago had some pain in right lower

quadrant; this had returned at intervals. Last night pain became very severe and went into condition of shock. Her physician sent her to the hospital this evening. Temperature 96, P. 160, Resp. 58.

Physical Examination.—Patient in profound shock. Heart and lungs negative. Abdomen distended, tender and rigid. A diagnosis of ruptured ectopic gestation was made and on account of her history,—repeated hemorrhage was feared—so abdominal section was performed and a large amount of blood came out. A ruptured left tubal pregnancy was found, tube and mass with clots removed. Patient was given the customary treatment for shock but in spite of treatment she gradually became worse and died one day later.

Case "C."—Mrs. C. H. Age 28. Admitted to hospital in condition of shock. Has had no history of menstrual irregularity. This morning at breakfast table she was seized with severe cramp-like pains in abdomen, felt faint and vomited. A few hours later was brought to hospital.

Physical Examination, by one of the staff a short time later, found her pale and weak, but pulse of good quality so she was sent to operating room. When the anesthetist examined patient a few minutes after she was brought to operating room, she discovered her to be pulseless. The writer and another member of staff were called at once and found that she was in profound shock and appeared to be in moribund condition. We decided not to operate but see if her condition would improve under treatment for shock. She did improve slowly and two days later was well enough to risk an abdominal section. The right tube was found ruptured 1 centimeter from the uterine end. A large amount of blood and clots was found free in the abdomen. Tube and blood removed. Patient made a slow recovery and went home in good condition 5 weeks after admission.

Case "D."—Mrs. H. C. Age 28. Admitted in extreme shock. Seven hours ago while lying in bed was taken with sudden severe general abdominal pains, fainted three times. Has been in state of collapse since and is growing worse.

Physical Examination.—Face pale and pinched. Mucous membranes blanched.

Chest.—Heart and lungs negative.

Abdomen.—Tender to touch and muscle spasm in lower part. Patient put to bed and treated for shock and after 18 hours condition is much improved. Operated on the second day. Abdominal section:—a large quantity of free blood and clots removed and the left tube was found to be ruptured one inch from uterine end. Tube and mass removed. Patient made an uneventful recovery.

Case "E."—Mrs. I. H. Admitted in extreme shock. Was taken one day before admission by sudden severe pain shooting through pelvis. Has not menstruated for six weeks. Has had a slight bloody vaginal discharge for several days.

Physical Examination.—Shows face pale and pinched. Pulse cannot be

counted and profound shock evident. *Treatment*.—Shock position, ice bags to abdomen, morph. gr. 1/6 for restlessness, Murphy drip or saline sub. q., no stimulant. Patient improved gradually and two days later her abdomen was opened, a moderate amount of free blood and clots were found and removed. The left tube was found ruptured and taken out. Right tube was absent. It was removed for ectopic gestation at a previous operation.

Conclusions as to Treatment.

1. All agree that if a diagnosis of an unruptured ectopic gestation is made it should be removed at once.

2. A ruptured ectopic gestation should not be attacked through the vagina,—

1. Because you cannot examine for points of possible future hemorrhage,

2. The clots of blood are often hard to get out and when infected cause, to say the least, a very uncomfortable and stormy convalescence, as shown in two of the cases recorded.

3. On account of the well-known association of pelvic inflammatory conditions with ectopic pregnancy, our records of 33% previous miscarriages, of 15% pelvic inflammation, and of 4% previous ectopic pregnancy, we are justified in advising careful exploring of the opposite tube when the patient's condition is safe for the additional delay.

4. Although the two deaths recorded *might have occurred* if the operation had been deferred and patients treated for shock, I think the records of all the *other cases*, some of which were equally as bad as far as appearance at least, justify the conclusion that in the majority of cases where patients are first seen in condition of shock with a diagnosis of ruptured ectopic pregnancy, it can be more safely treated by deferring operation until the patient is given a chance to rally.

DISCUSSION.

DR. INGALLS (Hartford): *Mr. Chairman and gentlemen:* I want to say a word, to say that I thoroughly agree with the conclusions Dr. Elliott has arrived at. In the face of a great deal of opposition some years ago, I advised the policy of waiting in the case of ruptured ectopic where there has been hemorrhage, and not to operate in the case of shock.

I was very severely criticized at that time for "delaying the work, but I think the results have justified the opinion at that time. Since then I have always stuck to those conclusions. Dr. Elliott's paper has conclusively shown that the cases in which he waited and in which the others waited, and in which the patients rallied from shock and had power enough to stand an operation did well. That would be obviously so. I will not say they may wait, but I will say in all cases of shock never operate, because I believe thoroughly that a patient brought in, in profound shock, that your operation is one hundred per cent sure to kill, and if you wait, you will get ninety-eight to ninety-nine per cent recovery. I believe it a cardinal rule not to operate in cases of severe shock and the end will justify the means.

I have never seen a case undergoing active hemorrhage while operating. I believe they are self-limited. The shock comes from the original hemorrhage and that is self-limited. You will find no active hemorrhage going on, and that is another argument in favor of waiting until the patient is over the shock.

We know a great many cases will get well if not operated on at all. We know a great many cases are not diagnosed and the results are found at future operations. I don't believe patients die from a ruptured ectopic. I believe they more often die from hasty surgery.

DR. ELLIOTT (Hartford): It is hard to add anything to Dr. Ingalls' discussion. I would like to add, however, that Robb in 1907 read a paper with an analysis of his cases and came to very similar conclusions. The majority of speakers at the next meeting of the American Gynecological Society did not agree with him. However, the conclusions drawn from my analysis substantially corroborates the conclusions drawn by Robb.

The opinion held by many that the condition of shock is due to the amount of blood lost into the abdominal cavity, has never been proven. There is frequently more blood lost during a miscarriage or at many full term deliveries that are accompanied with little or no shock.

By our results, above recorded, we feel justified in concluding that the additional shock of abdominal section on a patient already in profound shock lessens her chance of recovery more than deferring operation until the patient rallies.

Recent Advances in Neurological Surgery and Especially in the Diagnosis and Treatment of Brain Injuries.

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The field of neurological surgery has so developed within the last decade that I wish this afternoon merely to emphasize some points in the diagnosis and treatment of certain lesions of the brain, spinal cord and the peripheral nerves. This advance in neurological surgery has been due to three main factors:—earlier and more accurate diagnosis and localization, an improved operative technique, and, most important, better team-work—not merely between the operator and his assistants, which is most necessary for successful cranial operations, but of still greater importance that essential team-work between the surgeon and the neurologist at his side; formerly the neurologist knew little if any surgery and the operator knew little if any neurology; the result was frequently disastrous to the patient. The surgeon should have a practical knowledge of the principles of neurology—the more neurology the surgeon knows, so much the better will be his operative results; much permanent damage can very easily occur if general neurological principles are ignored.

If neurological surgery consisted chiefly in the removal of brain tumors it would be indeed a most discouraging field of endeavor. As you know, almost 80 per cent of tumors of the brain are malignant and even though a surgically successful removal of the tumor is possible, yet the end results are the same—the pitiful condition of the patient is merely prolonged; the severe headaches, however, and the impairment of vision are thus temporarily relieved and even prevented by an early

operative removal of the tumor. No patient should be allowed to become impaired visually from the increased intracranial pressure due to the growth of an intracranial tumor merely because the tumor cannot be located. These patients all should have an early decompression to relieve this increased intracranial pressure so that the vision will be spared, and then if the tumor does locate itself later, a successful removal of the tumor may be possible and yet the patient is not blind; I wish to emphasize this point as it is most discouraging to operate upon these cases of brain tumor who have become blind.

Tumors of the spinal cord, on the contrary, are much more favorable in that there is less liability of their being malignant; they can be more accurately located and are much more accessible surgically. The operation of laminectomy has become much less formidable within the past few years so that an exploratory laminectomy of a suspected spinal cord tumor should always be advocated early in order to anticipate any permanent damage of a compression transverse myelitis. The frequency of dural tumors of the spinal cord is most hopeful.

The condition of brain abscess has always been a most grave one. It usually results from an otitis media with its subsequent involvement of the mastoid; the usual site is the contiguous temporo-sphenoidal lobe, and less frequently the adjacent cerebellar lobe. As lesions of the cerebellum can be much more accurately diagnosed than those of the temporo-sphenoidal lobe, therefore, if we can rule out a cerebellar abscess, then the site must be in the temporo-sphenoidal lobe—a comparatively silent area of the brain, especially the right lobe in right-handed patients. Formerly the otologists in cases of suspected abscess of the temporo-sphenoidal lobe would puncture the dura in search of the abscess through the “dirty” infected field of the mastoid; as all operations for brain abscess are really exploratory procedures, it is distinctly unsurgical to open the clean subdural spaces and to puncture the cerebral cortex itself through an infected area; if the abscess is not located (and this frequently happens) then the patient runs the big risk of a resulting meningitis and thus the usual occurrence—the exitus of the patient. Besides, the

dura should not be punctured blindly with a knife or puncture needle unless the dura has been opened so that it can be clearly ascertained whether an underlying cortical vessel is present or not; many disasters from the resulting hemorrhage have frequently occurred from such procedures. It is much more rational surgically and a much better exposure is obtained to locate the abscess if the operative incision is made through the "clean" sub-temporal area, just as in a sub-temporal decompression—the vertical incision naturally being used; if the abscess is found, then it can be satisfactorily drained through the lower angle of the incision at the base of the skull; and if the abscess is not found then at least a decompression has been performed so that the intracranial pressure is relieved until the abscess may locate itself clinically, and the great danger of a meningitis and infective meningo-encephalitis has been avoided. In my series of brain abscess cases there are a number of them which I am sure I should have missed surgically if I had not used the better exposure of the sub-temporal route.*

The condition of cerebral spastic paralysis occurring in children is a most interesting study. In 1843, Mr. Little of London in his first monograph upon this subject stated that these cases were due to a lack of development of the cerebral tissues and also to an earlier meningitis; he did mention, however, that this condition apparently followed in some cases of difficult and prolonged labor with or without the use of instruments, and were undoubtedly, in his opinion, due to an intracranial hemorrhage; it is very interesting to note that in his second monograph upon this subject nineteen years later, in 1862, he states that, in his opinion, three-fourths of these cases of cerebral spastic paralysis in children are due to hemorrhage. These observations have been confirmed recently by more modern methods of diagnosis; it was formerly believed that hemorrhage in these cases caused a primary destruction of brain tissues,—therefore no regeneration was possible and thus an operative procedure would be of no value in treating the condition. Within the last five years I have

* The Laryngoscope, St. Louis, March, 1914.

had the opportunity of examining and treating personally almost 1,400 children having the condition of spastic paralysis.* By the more accurate methods of differentiating the ones due to hemorrhage from those hopeless cases due to a lack of development and to a former meningo-encephalitis for which nothing really can be done, it is now possible to diagnose the ones due to hemorrhage from these two conditions by means of careful ophthalmoscopic examinations of the fundi of the eyes and by a measurement of the pressure of the cerebro-spinal fluid at lumbar puncture by means of a spinal mercurial manometer; if the ophthalmoscope reveals the signs of a definite increase of the intracranial pressure and these observations are confirmed by the spinal mercurial manometer (the normal pressure of the cerebro-spinal fluid being 5 to 9 mm.), then we have an increased intracranial pressure and if this pressure is relieved permanently by a sub-temporal decompression and its modifications according to the condition of the underlying cortex as ascertained at operation, then a definite improvement results in these cases, both physically and mentally. In this series of almost 1,400 cases there was an increased intracranial pressure in about 20 per cent of them, that is, in about one out of every five cases examined, and these are the ones and only the ones that can be benefited by any operative procedure; I have now operated upon 279 of these children and the results have been very encouraging; naturally, the younger the child, the better the prognosis—the first few days of life being the ideal time for the operation, although most of the children have been between four and six years of age; the oldest patient, however, was 21 years of age and a slight improvement resulted. Naturally, a sufficient period of time has not yet elapsed for us to ascertain the ultimate condition of these patients following operation, but their improvement has been so uniform and continuous and the pathology of the condition being a hemorrhage *upon* the cerebral cortex and not in the cortex itself (in only 16 cases was the hemorrhage in the cortex or beneath the cortex), so that both the physical and

* New York State Journal of Medicine, October, 1916.

mental impairments are merely the secondary results of the increased intracranial pressure due to this supracortical hemorrhage. I might say in this condition that a permission for autopsy is obtained in all cases of neurological surgery (both private and ward patients)—no operation being performed unless this permission is given in writing,—so that if a death should occur then we shall ascertain the cause of death and also the accuracy of the diagnosis and the treatment for the benefit of future patients.

The condition of hydrocephalus has been a very interesting one in that it has now been ascertained that the type of internal hydrocephalus is comparatively infrequent and that the type of external hydrocephalus is the usual condition in these cases. They both result from an earlier meningitis (if we exclude those cases of internal hydrocephalus due to tumor formation at the base) and the condition is therefore a diffuse one; if the ventricles are blocked by adhesions or exudate in the aqueduct of Sylvius or at the foramina of Majendie and Luschka, then an internal hydrocephalus occurs, but if no such blockage is present, yet we shall have produced an external hydrocephalus because the cerebro-spinal fluid cannot escape from the cerebro-spinal canal through the blocked stomata of exit in the cortical veins, sinuses and possibly lymphatics. The methods used in the past and occasionally now advocated of connecting the ventricles with the subdural spaces by means of tubes are therefore of little or no value in the treatment of this condition; even though the lumen of the tube should remain patent (and it rarely does) and even if the condition is one of internal hydrocephalus (which is much more rare than that of external hydrocephalus), yet such an operative procedure will merely be changing the condition of internal hydrocephalus to one of external hydrocephalus and therefore little or no improvement can be expected. The method recently used for draining the ventricles in cases of internal hydrocephalus and of draining the subarachnoid and subdural spaces in cases of external hydrocephalus by means of linen strands is a much more rational procedure surgically than any of the methods used in the past and its results have been very

satisfactory; in the last report of 41 cases the mortality had been only thirteen patients.*

The condition of brachial plexus injury causing the so-called brachial birth palsy is the result of trauma to the plexus due to an over-stretching of its nerves by a forceful separation of the head from the shoulder at birth. Undoubtedly if the plexus has not been completely severed, then many patients recover from the temporary paralysis of the arm but in those children where the over-stretching has been so severe and even to a point of a loss of continuity of the nerve fibres, then a permanent paralysis of more or less degree will result unless the scar tissue resulting from the hemorrhage in and about the plexus is removed and the ends of the torn nerves are anastomosed by an operation. If the arm is completely paralyzed at birth so that not even the upper arm or the fingers can be moved, then the ideal time for the operation is at one month of age (no anaesthesia being necessary); if, however, the fingers or the upper arm can be moved slightly at birth, then we should wait until three months of age, and if no marked improvement has occurred within this time, then the operation should be performed. In these children I usually have the mother bring the child to the hospital in the morning, operate upon it, and then have the child taken home in the afternoon. The operation is not a difficult one technically, and there has been no mortality in a series of 104 cases.† These patients should not be allowed to reach the age of six years and even older without an attempt being made to improve their condition by an operation; the best results have been obtained in children under one year of age.

In fractures of the spinal column I feel that unless we can prove absolutely that there is a complete severance of the spinal cord or that the spinal cord has been irreparably contused, that we should give the patient the benefit of an exploratory laminectomy within a short time after the accident in order to remove any bony compression, hemorrhage or oedema of the

* American Journal of the Medical Sciences, April, 1917.

† Journal of the American Medical Association, March 18, 1915.

spinal cord, and thus increase the patient's chances of a greater ultimate recovery of function. So frequently in patients whom we consider to have suffered a complete severance of the spinal cord with complete loss of sensation and motion beneath the site of the injury, that after three months and even longer they begin to recover their sensation and also motion of the extremities formerly completely impaired; these patients are the ones upon whom an early laminectomy should have been performed and thus the ultimate improvement would have been much greater than can be obtained at this late date. The operation of laminectomy is no longer the formidable operation of the past and its use should be much more frequently advocated than at present; these patients are most pitiful ones—the end result, unless something can be done for them, being but a miserable existence of a few years.

The diagnosis and treatment of brain injuries has advanced most rapidly within the last few years. The clinical symptoms and signs are so varied and frequently so confusing in these patients that it is a most fascinating field; apparently in many cases the more extensive the fracture of the skull, the less seriously is the brain injured, and on the contrary, the most dangerous of brain injuries are frequently not even associated with a fracture of the skull. The following case is rather interesting from several points of view:—

On the afternoon of April the 10th, 1917, a little girl of nine years of age was returning home from school with her governess; while crossing a street six blocks from her home, she stumbled, bumping the left side of her head against the pavement; she jumped up without the assistance of the companion, and although the tears came to her eyes, yet she did not cry; she continued to walk to her home, ate her supper two hours later, and then went to bed at nine o'clock. The bump was such a trivial one that the governess did not think of mentioning it to the child's mother. At four o'clock the next morning (twelve hours after the fall), the child became restless and then vomited but did not complain of its head at that time; four hours later, just before breakfast, it again vomited and now the child complained of a "beating"

headache especially over the left side of the head. Doctor W. B. Hoag examined the child two hours later to find only a slight tenderness over the left posterior parietal area (the site of the bump) and exaggeration of the deep reflexes—the right being possibly greater than the left; the pulse rate was 90; there was no ecchymosis nor bleeding from the ear. At a consultation three hours later, the same signs were observed and a lessened activity of the right abdominal skin reflexes; the ophthalmoscopic examination of the fundi was negative; the child complained of a general headache and some dizziness upon raising the head; she was active mentally—so much so that she cried bitterly when we suggested her removal to a hospital for a four days' observation. She was admitted to the Polyclinic Hospital at four o'clock in the afternoon (just 24 hours after the injury); her pulse rate at this time was 82. A Roentgen-ray picture was now taken revealing an irregular line of fracture extending from the occipital protuberance forwards to the left squamous bone but not down to the base of the skull. The measurement of the pressure of the cerebro-spinal fluid at lumbar puncture, by means of a spinal mercurial manometer, registered 16 mm. (normal, 5-9 mm.); the fluid was clear. During the night the pulse gradually descended to 76 at midnight, 66 at 4 o'clock in the morning and at 10 o'clock the pulse rate was 58; the child had become alternately restless and drowsy—would awaken with a cry and even scream from the intensity of the headache, and then quickly lapse into a mildly stuporous condition from which she could easily be aroused; there was now a definite inequality of the exaggeration of the deep reflexes—the right being markedly increased over the left to the degree of both a right patellar and right ankle clonus, but no Babinski reflex could be elicited; the right abdominal reflexes were now found to be entirely abolished; the right hand grasp was possibly weaker than the left; but there was no apparent weakness of the right side of the face or of the right leg; an impaired sensation could not be elicited. An ophthalmoscopic examination at this time revealed a marked dilatation of the retinal veins and an oedematous blurring of the nasal halves and temporal margins of the optic discs—pos-

sibly greater in the left than in the right eye; there was, however, no measurable papilloedema. Speech was not impaired nor was there present any astereognosis. No reduction of the visual fields could be ascertained and an homonymous hemianopsia was not present. In order to relieve the increased intracranial pressure whether due to cerebral oedema or to hemorrhage, a rather posterior left sub-temporal decompression was performed forty-four hours after the bump; a small line of fracture extended obliquely downwards through the squamous bone but did not reach its base—therefore, no ecchymosis about the ear nor bleeding from the external auditory canal; upon rongeur-ing away the squamous bone lying beneath the temporal muscle an extradural currant-jelly clot of the thickness of $1\frac{1}{2}$ inches welled up through the bony opening; as much as four ounces of clotted hemorrhage were removed with a spoon-spatula allowing the underlying compressed dura and brain to rise; the cavity extended upwards to the longitudinal sinus and backwards to the tentorium; a small amount of cerebral tissue was found in the upper portion of the clot so that the dura had undoubtedly been torn in that area; the posterior branch of the middle meningeal artery had also been torn—the usual cause of this type of hemorrhage. As the dura itself was now no longer under tension and the underlying cerebral convolutions could be clearly observed, it was thought to be better surgical judgment not to open the dura in this case. The temporal muscle and fascia were now sutured and then the scalp—two rubber tissue drains having been inserted extradurally. The convalescence was uneventful; pulse rate became 76 upon the first day post-operative and the other signs noted above quickly faded away so that the child made an excellent recovery.

The main points of this case have been described in detail in order to illustrate the apparent triviality of the initial symptoms and signs of many brain injuries with or without a fracture of the skull. Similar cases of an acute intracranial lesion occur not so infrequently but that we should always be most careful in our examinations of patients having a history of a recent head injury of even the most trivial character and especially is this

true of children who withstand the effects of brain injuries much better than adults. There are several tests that should always be employed and repeatedly performed if necessary upon these patients, not only to locate the site of the brain injury but far more important, to ascertain the presence or not of an increased intracranial pressure, whether that pressure be due to intracranial hemorrhage or to cerebral oedema. As is well known, the fracture in these cases (if we exclude depressed fractures of the vault which should always be elevated or removed) is possibly the most unimportant part to be considered in the treatment, whereas the presence of a marked increase of the intracranial pressure with or without a fracture of the skull should immediately cause the patient to be withdrawn from that large group of patients properly treated by the expectant palliative method, and the advisability of an early operative procedure to relieve the increased intracranial pressure should be considered.

During the three years 1913, 1914 and 1915,* I examined and treated personally 239 adult patients having acute brain injuries with or without a fracture of the skull; in only 79 of these 239 patients (that is, 34 per cent) were there marked signs of an increased intracranial pressure, and therefore only these patients were operated upon to relieve this increased pressure, whereas the remaining 160 patients did not show definite signs of an increased intracranial pressure and were therefore treated by the expectant palliative methods of absolute quiet, ice helmet and catharsis; if in shock, then the routine treatment of shock. It is thus seen that only one-third of the patients having brain injuries with or without a fracture of the skull were operated upon, and approximately this same ratio has continued during the past year. It is this careful selection of patients not only in regard to the advisability of an operation or not, and if indicated, then the type of cranial operation used, but of the greatest importance—the ideal time for performing the operation—these factors have made it possible to lower the mortality of fractures of the skull from the average of 50 per cent of most hospitals to 30.7 per cent at the

* Journal of the American Medical Association, May 13, 1916.

Polyclinic Hospital, and if we exclude the moribund patients dying within three hours after admission to the hospital from shock, internal injuries and in many cases the fracture of the skull being but an accident in the patient's general condition, the mortality is lowered to only 19 per cent.

In the treatment of brain injuries with or without fractures of the skull, if the patient is allowed to develop definite paralyses, a lowered pulse-rate, Cheyne-Stokes respiration and pulse and that appalling group of extreme intracranial pressure signs, then I agree entirely with the opinion so commonly now held that these patients "get along" just as well without operation as with operation at this late stage—the mortality being 50 per cent and over; but the patients with brain injuries should not be allowed to reach this dangerous stage of medullary compression due to the high intracranial pressure—it should be anticipated by accurate diagnostic methods now known and if a marked increase of intracranial pressure is ascertained, then an early relief of it should be advised, not only to save the life of the patient but to lessen the post-traumatic conditions of changed personality either of the excitable or the depressed type, persistent headaches, early fatigue, occasionally epilepsy and that long train of post-traumatic conditions so frequent in brain injuries and due in the majority of cases to a prolonged increase of this intracranial pressure.

Besides the lowered pulse- and respiration-rate which are comparatively crude signs of intracranial pressure and if of the irregular Cheyne-Stokes type, then most late signs of extreme intracranial pressure with its resulting medullary compression, the two most valuable procedures for determining a definite increase of the intracranial pressure are the examinations of the fundi of the eyes with the ophthalmoscope and the measurement of the pressure of the cerebro-spinal fluid at lumbar puncture by means of the spinal mercurial manometer.

Although it is rare for a measurable papilloedema and "choked disks" to occur in these cases of traumatic intracranial lesions with or without a fracture of the skull, yet the earlier and therefore milder degrees of an oedema of the optic disks should

be most carefully "watched for" with the ophthalmoscope as being one of the accurate signs of the presence or not of a definite increase of the intracranial pressure; the ophthalmoscope and especially the direct method is a most valuable means in the diagnosis of cranial lesions. Rarely do these fundal examinations reveal an increased intracranial pressure within six hours after the head injury; this is due to the presence of shock in these patients who later exhibit the marked signs of intracranial pressure; as head injuries are usually accompanied by shock of varying degrees, naturally in these cases the blood pressure is low so that even if a large intracranial vessel was torn, yet there could be only a comparatively small amount of hemorrhage because the resulting increased intracranial pressure would soon be greater than this lowered blood pressure of shock, and therefore the bleeding would cease; however, as the patient recovered from the condition of extreme shock, then the blood pressure would rise, and now more bleeding could occur intracranially until the intracranial pressure would again equal the lowered blood pressure; finally, if the patient survived this condition of shock, then the blood pressure would be continuously greater than the intracranial pressure, so that this resulting increased intracranial pressure would produce its characteristic signs in the fundus of the eye—a dilation of the retinal veins, and an oedematous blurring of the nasal halves, and if still higher, then an oedematous obscuration of the temporal halves of the optic disks; a measurable papilloedema and "choked risks" occur in these cases only when the intracranial pressure is extreme due to a large intracranial hemorrhage of slow formation, such as the extradural middle meningeal type—just as in brain tumors or when the ventricles are blocked producing an internal hydrocephalus; naturally, if the intracranial hemorrhage forms very rapidly and of large amount, the patient usually dies within a couple of hours so that "choked disks" have very little time to be produced; again, the shock following head injuries usually lasts for about six hours in the patients who survive and therefore it is rare within these first six hours for the ophthalmoscope to reveal definite signs of an increased intracranial pressure; it may

be also noted that the patients who do not survive the condition of shock—they usually die within the first six hours. It is therefore of the greatest importance to recognize these early signs of increased intracranial pressure by repeated ophthalmoscopic examinations and to realize that these oedematous blurrings of the optic disks are more than being merely within physiological limits; it is true that in cases of myopia there is normally an obscuration of the disk outlines, but these patients can be excluded by the second and following test which should always be performed.

The most accurate means now known for ascertaining the presence or absence of an increased intracranial pressure is the measurement of the cerebro-spinal fluid at lumbar puncture by the spinal mercurial manometer. It is similar to a blood pressure apparatus, as safe as a lumbar puncture when properly performed, and by it the varying degrees of intracranial pressure can be carefully recorded. The normal pressure is 5-9 mm. of mercury, so that if a pressure higher than 15 mm. is obtained at lumbar puncture, then we know that the signs of intracranial pressure, as shown in the fundus of the eye, are confirmed. This method of estimating intracranial pressure is most important in the differentiation of the intracranial condition of spastic paralysis due to hemorrhage at birth from those other causes of the so-called Little's disease. In other intracranial conditions producing the extreme stages of papilloedema and "choked disks," and even their end results of secondary optic atrophy as in neglected cases of brain tumor, naturally it is not necessary to confirm the ophthalmoscopic findings in order to make a diagnosis of an increased intracranial pressure. If, however, in these traumatic lesions of the brain, we must wait until a "choked disk" results from extreme intracranial pressure in order for us to state that the intracranial pressure is high, and if we must wait for the pulse-rate to descend to 60 and below and the respiration and pulse to assume the irregular Cheyne-Stokes character of medullary compression, then undoubtedly the mortality of these patients will be 50 per cent and even higher. Patients should not be allowed to reach this dangerous stage of medullary com-

pression—this stage should be anticipated—and it can be by repeated ophthalmoscopic examinations and the measurement of the pressure of the cerebro-spinal fluid at lumbar puncture.

In selected cases of mild intracranial pressure due to trauma, very frequently the convalescence can be shortened, the headaches relieved and the general condition of the patient greatly improved by lumbar puncture, and if necessary, repeated lumbar punctures; not only will the oedematous “wet” condition of the brain be drained in this way, but a prolongation of the increased pressure be avoided and therefore the definite danger of post-traumatic conditions, so common in these cases, be lessened. Naturally, this method is only applicable to mild selected cases, and lumbar puncture should never be advocated as a means of drainage in patients having high intracranial pressure or in subtentorial lesions for fear of a consequent medullary compression in the foramen magnum.

We now come to the most important and the difficult question in the treatment of brain injuries with or without a fracture of the skull: “If an operation is advisable, when should it be performed?” This question can more easily be answered by stating the two periods when the operation should *not* be performed. Naturally, we must exclude the majority (about two-thirds) of fractures of the skull who do not have a definite increase of the intracranial pressure and therefore no operation is indicated. (The depressed fractures of the vault naturally should always be elevated or removed.)

The two periods in which an operation is distinctly contra-indicated in cases of brain injury, are, first, the condition of severe shock in the very beginning, and secondly the condition of medullary collapse—the death knell of the patient. To advise a cranial operation upon a patient—no matter how badly the skull is fractured, nor how extensive the intracranial hemorrhage seems, and that patient is in the condition of severe shock with a pulse-rate of 120 and higher, then the operation at that period of shock takes away whatever chance the patient may have of surviving the shock: the operation is but an added shock and merely hastens the exitus. No patient having a brain injury should be

operated upon in this condition of shock; the mortality is most high and if a patient does recover from an operation in this period of extreme shock, then he recovers in spite of the operation. Cranial operations for brain injuries in this stage of shock were frequently performed in the past and most disastrously, and thus operations were almost discredited in the treatment of brain injuries. The natural reaction following these early operations in the period of severe shock was to wait until there could be no possible doubt that the patient was going to die, unless, as was thought, a cranial operation was performed; that is, the patient was permitted to reach the period of extreme medullary compression—a pulse rate of 50 and below, irregular Cheyne-Stokes respiration and pulse and profound unconsciousness, before a cranial operation might be considered. This is a most dangerous stage for these patients to reach, and it is doubtful whether recovery can occur even with an operation at this period—the mortality being very high. But if the patient has struggled through this period of medullary compression, and finally reaches the stage of medullary oedema, when the pulse-rate begins to ascend quickly to 120 and higher, respirations become rapid and shallow—that is, the stage of medullary collapse, then we have the second period when no patient should be operated upon—they all die—operation or no operation. I feel that if these two extremes can be avoided and the latter of these, medullary collapse, can certainly be anticipated in the operative treatment of brain injuries and their signs cannot be overlooked, that the rational treatment from an operative standpoint depends upon the presence or not of a definite increase of the intracranial pressure whether there is a fracture of the skull or not; in some of the most serious cases no fracture was present—either to be ascertained at operation in the operated cases, or at autopsy. The aid of the Roentgen ray is important in the treatment of these traumatic cases only in patients with doubtful depressed fractures of the vault, and in latent fractures of the skull, where the bump is so apparently trivial that the patient might not be so carefully examined and treated as the condition would warrant. On the contrary, no patient with high intracranial pressure should

be obliged to wait "over night" or for a period of hours merely to secure a Roentgen-ray picture of the skull; it is of no importance in the treatment of these acute intracranial lesions whether a fracture is present or not; if there is a high intracranial pressure as shown by the ophthalmoscopic examination and by the measurement of the pressure of the cerebro-spinal fluid at lumbar puncture by the spinal mercurial manometer, then a cranial operation is indicated to relieve this increased intracranial pressure both by enlarging the intracranial cavity and by the drainage of possible hemorrhage and cerebro-spinal fluid; it is not so much a question of removing the hemorrhage as it is of lessening the increased intracranial pressure—whether that pressure is due to hemorrhage or oedema—the operative indication is the same; many cases of head injuries at autopsy have revealed no hemorrhage at all—merely a "wet" oedematous swollen brain, but sufficient to cause medullary compression and the death of the patient.

If an operation is considered advisable to relieve the increased intracranial pressure, then the operation of choice is the sub-temporal decompression and drainage; if there are no definite localizing signs of the intracranial lesion, then the decompression should always be performed on the right side in right-handed patients in order to lessen thereby any possible operative damage to the adjacent motor speech area. In these cases, it is not so important to remove the hemorrhage as it is to offset its pressure effects. In cases of depressed fractures of the vault showing definite signs of a high intracranial pressure, it is better surgical judgment to precede the elevation or removal of the depressed area of bone by a sub-temporal decompression so that when the depressed bone is removed there will be little or no danger of the underlying cerebral cortex being damaged by its protrusion through the bony opening; as the sub-temporal decompression exposes a comparatively silent area of the brain—a portion of the temporo-sphenoidal lobe—its protrusion and possible damage would not appear clinically, whereas a partial paralysis, impairment of sensation or of vision might occur, and frequently does result from operations performed over the more

highly developed areas of the cerebral cortex. Besides, the subtemporal route provides not only an excellent exposure of the middle meningeal artery and that portion of the brain so frequently involved in fractures of the skull, but it affords drainage to the middle fossa of the skull—the chief intracranial cistern—at its lowest point at the base of the skull; again, the thinness of the squamous portion of the temporal bone makes the operation a less difficult one technically. The vertical incision (and not the usual curved incision) should be used not only to render the operative hemostasis more effective in that the trunk of the temporal artery is clamped at its lowest point at the very beginning of the operation and therefore there is no bleeding from its branches, but this incision also permits the removal of the underlying squamous bone as far as is possible beneath the temporal muscle—a diameter of three inches—and yet the attachment of the temporal muscle to the parietal crest is left intact so that a firm closure of its separated muscle fibres is assured; this is a most important point in cases of high intracranial pressure as in brain tumor where a cerebral hernia or fungus might result from an imperfect closure of the temporal muscle. The insertion of silver and celluloid plates and other foreign bodies beneath the scalp is to be most strongly condemned.

If the intracranial pressure is so high that the cerebral cortex tends to protrude through the bony opening, it is frequently wiser in selected cases to perform a similar operation upon the opposite side of the head immediately after the first operation; I have been obliged to do this in only five per cent of the patients; they are the ones having a swollen oedematous brain—"waterlogged" as it were, where the drainage of blood and cerebrospinal fluid is slight and not sufficient to cause a marked decrease of the intracranial pressure; in some doubtful cases, it is better judgment to wait for one or two days and even longer, before the second operation is considered advisable. The rubber tissue drains are usually removed on the first or second day post-operative, and the hospital convalescence ordinarily requires at least two weeks. Naturally, these patients should not enter into their former active life for a period of three months and even longer;

a too early return to the strain and stress of modern life predisposes them to many complaints—both subjective and objective; repeated examinations of the fundus of the eye and of the superficial and deep reflexes are here most important in estimating the physical normality of the patient.

The end results of patients having brain injuries with or without a fracture of the skull have been an interesting study. It has become quite a common belief that once a man has had a fracture of the skull and then recovers, he is never the same person again. In 1912, I examined the records of three of the large hospitals of New York City during the decade of 1900-1910; the mortality of fractures of the skull was 46-68 per cent; the mortality of the patients operated upon was 87 per cent—this high percentage due undoubtedly to the operation being postponed until the extreme stages of medullary compression and oedema, and also to the fact that the operation performed was the “turning down” of a bone flap—a much more formidable procedure than a decompression—and then the bone replaced so that even the benefits of a decompression were prevented; besides, in many cases, the dura was not opened, and as the dura is inelastic in adults, therefore no adequate relief of the pressure could possibly be obtained. Of the patients, however, who were finally discharged as “well” or “cured,” I was able to trace only 34 per cent, but of these 34 per cent of the total patients found, 67 per cent of them were still suffering from the effects of the injury—that is, two-thirds of them were not as well as before the injury; the chief complaints were persistent headache, a change of personality of the depressed or of the excitable type and thus emotionally unstable, early fatigue making any prolonged mental or physical effort impossible and thus the inability to work, lapses of memory, spells of dizziness and faintness, and even epileptiform seizures in a small percentage of them. In examining the hospital records of the patients having these post-traumatic conditions, it was most interesting to ascertain that these were the patients—and there were but few exceptions—who regained consciousness gradually after several days and remained in the hospital for a

period of four weeks and longer, whose charts made frequent mention of the severe headache and a low pulse rate of 60 and in some cases below 60—that is, the usual clinical signs of an increased intracranial pressure; an ophthalmoscopic examination had rarely been made. Many of these patients still showed the results of the increased intracranial pressure in their fundi and at lumbar puncture, and these were the ones upon whom a cranial decompression even at this late date caused a marked improvement; the operative findings were always associated with a “wet” swollen oedematous brain; many of the so-called post-traumatic neuroses are in my opinion frequently superimposed upon this definite organic basis as the result of the brain injury.

The treatment, therefore, of brain injuries should not be limited merely to the recovery of the patient as far as life is concerned but it should also be directed toward obtaining a normal individual—approximating as closely as possible the condition of the patient before the injury.

Dr. Sharpe, after the following introduction, demonstrated a brain operation with motion pictures: “I would like to say just a word regarding these pictures. I had been trying for some time to have a moving picture of a cranial operation, particularly of this type of brain injury. This patient was brought into the hospital and the moving picture apparatus was all ready for him. It happened to be a man fifty-four years of age, a cab man, alcoholic, who had fallen from his cab while intoxicated. He was brought into the hospital unconscious, bleeding from both ears and the cerebral spinal fluid, however, coming from the right ear—therefore, a basal fracture in that area.

“Upon examination he apparently was in no shock and at the time of the ophthalmoscopic examination no signs of pressure. However, the lumbar puncture by the use of the spinal mercurial manometer revealed blood under high pressure, registered 17 mm. mercury, about twice the normal amount (5-9 mm.); the pulse in this case was 62. Neurologically he had some weakness of the left side of his body, especially the left leg; his

reflexes also were increased on the left side—there being a typical Babinski reflex. A right sub-temporal decompression was advised. No anesthesia was required at first, but upon incising the temporal fascia he came out of his unconsciousness so that ether was obligatory. As is shown in the picture, both a fracture at the underlying squamous bone and a sub-dural hemorrhage were exposed. The patient had an uneventful convalescence in the hospital and has made an excellent recovery.”

20 West 50th Street, New York.

The Distribution of Fat in the Appendix and its Relation to Inflammation.

DR. GEO. M. SMITH, WATERBURY.

(From the Surgical Division of the Waterbury Hospital.)

The accumulation of visible fat in various regions of the body has long been a matter of study; and much clinical and experimental data are now at hand to show the relation of fat to normal and pathological processes. With the exception of the heart and the blood vessels, the solid parenchymatous organs have been of chief interest for their variations in content, distribution and nature of fat. It is only in more recent times, with the renewal of interest in the study of lipoids, caused by the application of improved methods of analysis, that some of the hollow organs of the abdominal cavity have become the object of investigation.

It is a matter of general knowledge, particularly since the researches of Rosenfeld (1), that the visibility of fat in tissues is not necessarily a true index of the entire fat content of the organ; for many of the lipoids found in tissues are held in an invisible combination with other substances, becoming an object of visible demonstration only when chemically liberated from the substances with which they are associated. On the one hand, a kidney showing a marked fatty condition on gross or microscopic examination, when chemically analyzed may show no increase in fat over what is normal. On the other hand, a kidney exhibiting on inspection or by staining methods very little or no fat, may be found to contain an unusually high percentage of fat when chemically examined. For practical purposes, however, any extensive accumulation of visible fat in an organ is regarded as satisfactory evidence of pathologic increase in its content of fat.

Many investigations have been undertaken to explain the process by which an abnormal deposit of fat occurs. In a general

way it may be said that the body stores fat in various regions under normal circumstances, and these places are often referred to as "fat depots." The sites for storage of fat vary somewhat at different periods of life; and even the chemical composition of the fat may show variations, depending upon the locality in which the fat is found. Fat depots are in regions such as the panniculus, the fatty capsule of organs, the mesentery and in the tissues of the mammary gland. These regions, as Kawamura (2) has pointed out, are chiefly neutral fat, formed by glycerine esters. Considerable amount of fat exists in the body, however, formed by cholesterine esters, characterized by the physical properties of being doubly refractive or anisotropic, showing a cross of light when examined by polarized light. These fatty globules exist normally in the adrenals, thymus and the lutein cells of the ovary, and are found as abnormal fats in other parts of the body. There is still another large group of fatty substances, called myelin substances, which become visible only under strictly abnormal conditions. When, for instance, as the result of a profound disturbance, tissues become necrobiotic, or autolytic, myelin droplets are formed. The term fat phanerosis has been applied to the condition where invisible lipoids become visible under abnormal circumstances.

Organs affected with a pathologic accumulation of fat often show special anatomical areas where the deposit of fat is greatest in amount. In the blood vessels and in the heart it is characteristically sub-endothelial, although the musculature of both the blood vessels and the heart may be strikingly affected. In the liver the storage of fat is within the liver cells, while in the pancreas fat forms between the lobules and among the acini. In the appendix, as will be explained, the accumulation of fat appears to be mostly in the submucosa.

The problem of fat accumulation is associated with cellular metabolism, in which oxidation is probably the chief fault. As Wells (3) has pointed out, constituents of fat (as glycerine and fatty acids) are brought to cells through the medium of tissue fluids, and are there converted by the enzyme lipase into the forms of fat useful for the growth and function of the particular

cell. The intracellular fat is resolved again into its constituents by other enzymes when occasion demands their use. Anything interfering with the synthesis or with the breaking down of the fats may cause abnormal accumulation of fat either within the cells of an organ, or in neighboring tissues, for lipase is found in all body fluids and may act to form fats at any point where the proper conditions for this process exist. Any severe injury to cells, such as is produced by certain poisons, may cause an abnormal formation of fat in the cells affected. Injury to tissues through inflammation appears also to be associated with fat accumulation. As examples of this it may be said that chronic inflammations of the kidney cause fatty degeneration of renal epithelium. In pneumonic processes of long standing, areas of fatty tissues may occasionally be found. In the periphery of chronic abscesses and edges of growing tumors lipoids can, at times, be demonstrated. Aschoff (4) has pointed out that fatty substances, particularly cholesterine, may be found in the mucous membrane of the gall-bladder when this is the site of inflammation. As far as can be ascertained by a review of the literature, the relation of fat formation to inflammation of the appendix has not been defined.

The occurrence of fat in the appendix was first noted by several of the earlier anatomists, chiefly incidental to the study of the so-called involution of the appendix. The materials for this study were from autopsies. Wolfer (5) was probably the first to note that fatty tissue existed in the obliterating appendix. In a small number of appendices of adults examined by him there was found a loss of mucous membrane of the appendix and the submucosa formed a network of fatty tissue.

Zuckerhandle (6) studied with much care the obliteration of the appendix, contributing a great deal to our knowledge of the histology of this condition. It is not necessary to go into details of his work at the present time, except to point out that he thought the presence of fat played an important part in causing obliteration of the lumen of the appendix. In thirty-seven appendices examined, which had shown an atresia of the lumen, seventeen contained fat; two showed areas of fat and areas

without fat; eighteen were without fat, among these nine with a contracting atrophy of the appendix. Zuckerkandle believed that the early evidences of obliteration of the appendix occurred as a great thickening of the submucosa, which was supplied not only with an increased number of blood vessels but also with fat to such a degree that, on cross section of the appendix, it might look like a lobule of fat. These masses of fat were arranged radially and were traversed by connective tissue. In what he believed represented a somewhat later stage, the connective tissue appeared more dense, nearly or entirely free from fat. The final stage of obliteration Zuckerkandle recognized anatomically as a thin cord-like appendix, with no fat or only an occasional globule.

Suduski (7) also studied autopsy material and found that in young individuals no fat was present in the appendix; while in older subjects, even in the absence of all traces of obliteration, considerable amount of fat might occur. Suduski found appendices showing early obliteration without fat at the site of the lesion. He did not agree, therefore, with Zuckerkandle's views that an accumulation of fat was associated with an early phase of obliteration. All these investigators regarded the obliteration of the appendix as a process of involution and not of inflammatory origin.

It is generally conceded, at the present time, that what is known as partial or complete obliteration of the appendix is in a large part the outcome of chronic inflammation, which gives rise frequently during life to clinical symptoms, yet often remains clinically unrecognized. Inflammatory changes in the appendix, which are clinically obscure, may begin in early infancy. In 200 appendices in infants under one year, which I had occasion to examine at autopsy, seventeen showed histologic evidence of inflammation (8). MacCarthy (9), in a study of a vast amount of material, found that partial obliteration might be present as early as the fifth year, and complete obliteration was seen as early as the tenth year. He estimates that the average time necessary for complete obliteration of the lumen of the appendix is approximately four years and believes that inflammatory processes must determine these rapid changes. As is well known,

with increasing years, evidence of obliteration is more and more frequent so that, at the end of the sixtieth year, over fifty per cent of all appendices at autopsy show evidence of this condition.

Methods and Results of Study.

The present work is based on the gross and microscopic study of 217 appendices removed at operation gathered principally from the surgical material of the Waterbury and St. Mary's hospitals. These tissues were fixed in formalin and sectioned transversely with a razor into small segments, 2 to 5 mm. thick. After formalin fixation for forty-eight hours, the appendices were washed for a half-hour and placed in an alcoholic solution of Sudan III or Scharlach R for from two to three days. All fats were stained red by this time and the tissues were then removed and permanently placed in 10% formalin. Blocks, for microscopic study, were taken from the appendices as a rule before staining the gross tissue in Sudan. Blocks were cut on the freezing microtome and stained with Sudan and mounted in glycerine for study.

A preliminary gross study was made of the entire gastrointestinal tract, treated in this way, of a normal adult, age twenty-five years, six feet tall, who died four days after an accident.

It was found that the walls of the cesophagus in this individual contained no visible fat. The wall of the stomach was also fat free, except in a few of the larger folds of the stomach where fat was present in very moderate amounts, situated in the submucosa. There were small amounts of fat in the submucosa of the pylorus. The duodenum, jejunum and ileum did not stain for fat. The ileocecal valve, however, showed considerable amounts of fat. The cecum, the colon, the sigmoid and the rectum showed definite yet moderate amounts of fat in the submucosa. The ileocecal valve was most conspicuous for its content of fat. In four other specimens, removed at autopsy, fat in the ileocecal valve seemed abundantly present. The appendix of this normal individual was patent throughout and showed fat here and there in the submucosa, especially at its base and in the fold corre-

sponding to the valve of Gerlach. The extreme tip was fat free. It would seem from this single study of what approaches normal adult conditions as closely as possible that any large fold or valve of the gastro-intestinal tract may contain fat, and that fat forms part of the gross structure of the submucosa of the large intestine and the appendix. In the foetus and in the infant this fat was not visible in either the cecum or the appendix. In ten appendices belonging to late fetal life or early infancy, no visible fat was demonstrated in either the cecum or the appendix. This is in harmony with the view of Suduski, who believes that fat makes its appearance after birth and is present, to some extent, in all appendices of adults.

There were 132 appendices examined, removed for disease of the appendix, which could be classified as chronic appendicitis. It was apparent at once that the deposit of fat was an important feature of the obliterative process. In most of these appendices fat was present, and this varied in amount over a wide range. In some appendices fat was absent or nearly absent; in others fat was extreme and formed the most conspicuous feature of the lesion. It would appear from this, that chronic appendicitis actually divides itself into two groups; the first exhibiting no increase in fat, the second showing an unusual accumulation of visible fat. It was more common to find that the region at the base of the appendix was affected and contained more fat than did the tip, even though it is common knowledge that obliterative changes often make their earliest appearance in the distal end of the appendix. At sites of stricture fat was found more often than not; yet it was almost the rule that the fat, at the points of stricture, was no greater in amount than elsewhere in the appendix. Twelve cases, out of 154 cases of chronic appendicitis, showed a marked condition of fat accumulation. These fatty appendices all exhibited a tendency to obliteration of the lumen. Histologically the fat was in large masses or small globules in all parts of the thickened submucosa, which encroached upon or filled the lumen. Fat globules were found at times between the muscle bundles or actually in the muscle substance, slight amounts occasionally in the serosa. A striking feature was the massing of fat about the blood vessels, and this fact suggests the

possibility that circulatory disturbances play a rôle in the origin of fat. The mucous membrane showed little fat, except that the epithelial cells contained fatty granules as can be seen under normal circumstances when fat is absorbed from the content of the intestine. When epithelium contained fat it was usually in small groups of cells scattered here and there, particularly those deep in the folds of the mucous membrane.

Clinically this condition of fatty appendix occurred in the male six, in the female thirteen times. In several of these patients there was a tendency to obesity. It was seen as early as the sixteenth year, while the oldest patient exhibiting the condition in this series was forty-two years of age. The condition of fat in the meso-appendix was no index of the extent of fatty involvement in the appendix itself. In one patient the condition was associated with chronic cholecystitis with stones, in another with chronic salpingitis. The wall of the gall-bladder showed a slight amount of fat, the tube showed none. The clinical histories of patients with fatty appendices appeared to differ in no way from that of the usual chronic case of appendicitis. From the histological study of these appendices one gets the impression that there is a great massing of fat about the blood vessels and lymphatics, particularly the former. This would point to the possibility that circulatory disturbances, in addition to inflammation, play a part in the abnormal accumulation of fat in the tissues of the appendix, particularly as bends, kinks, twists and adhesions are so common in this type of appendicitis. Impairment of circulation under experimental conditions has been found to contribute to abnormal formation of fat in the tissue involved. According to Fischler (10) this has been found to be the case in the margins or edges of infarctions where circulation is impaired yet where tissues are still viable. Dietrich (11) noted the appearance of fat in tissues implanted into the peritoneal cavity. The characteristic "tigering" of the heart seen at autopsies when the heart is the site of fatty degeneration is usually attributed to impairment in circulation.

In acute suppurative or gangrenous appendicitis, of which eighty-five specimens were examined, visible fat plays an inconspicuous part in the lesion. It is not infrequently the case, espe-

cially in gangrenous appendicitis, that small areas of the wall of the appendix take on a dull orange color when stained with Sudan. Such orange zones are found in any part of the wall, and microscopically the tissues comprising these zones show a granular light yellow stain. These areas probably represent fat phanerosis in necro-biotic or autolytic regions. Where an acute condition is grafted on a chronic process, fat is present and shows a distribution such as that already described above for chronic appendicitis.

Conclusions.

The larger folds of the stomach, the pylorus, the ileocecal valve, the large intestine and the appendix contain normally moderate amounts of fat in the submucosa, the fat making its appearance after birth.

Chronic inflammation of the appendix may be associated with or without an increase of fat. In about fourteen per cent of cases of chronic appendicitis the increase of fat was very marked, involving at times the muscular coat as well as the submucosa.

Abnormal accumulation of fat in the appendix is probably induced by impairment of circulation in addition to inflammation.

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CLINICAL SESSIONS.

Clinical Sessions.

Clinical sessions of the Society were held on Thursday morning, May 24th, at the Clinical Laboratory of the Yale Medical School, at the New Haven Hospital, at Grace Hospital and at the Hospital of St. Raphael. The complete programme of these sessions will be found in the report of the Committee on Scientific Work.

Requests for reports of the clinical meetings were made of all physicians who took part in them. The following have been received:

NEW HAVEN HOSPITAL.

Dr. Hartshorn showed patients demonstrating the results of operation in the following condition:

- (1) Imperforate anus in a child with recto-vaginal fistula.
- (2) Congenital harelip.
- (3) Fracture of patella.
- (4) Halsted-Andrews operation for hernia.

Dr. Mailhouse showed a case of pseudo-muscular hypertrophy with evidences of bony malformation and derangements in the functions of the endocrine glands.

Dr. Blumer showed a case of paramyoclonos multiplex of which the following is a report:

Report of a Case of Paramyoclonus Multiplex (Myokimia).

GEORGE BLUMER, M.D.

Since 1881, when Friedrich described the first case, there have appeared from time to time reports of a condition which has been called by various names. Friedrich's designation was paramyoclonus multiplex, but others have designated cases as myoclonus spinalis multiplex, myoclonia, myokimia, polyclonia and myospasia. The various conditions which have been grouped under these various names have only one symptom in common, namely, peculiar, almost lightning-like contractions of voluntary

muscles or parts of voluntary muscles. It is, indeed, very doubtful whether the term disease should be applied to these cases, it would seem hardly logical to speak of the condition even as a symptom-complex for the muscle changes are the sole abnormality in most instances. The following history details the findings in a patient referred by Dr. Joseph P. Ryan of Hartford in whom the condition existed:

L. L., aged 27, a Pole, married, a polisher of silver and plated ware. He complained of muscular twitchings.

The illness was of sudden onset, and dated back seven weeks. The day after lifting a heavy box of coal, the patient noticed headache and a burning sensation at the base of the skull. He had hot sensations in the feet and cold sensations in the ends of the fingers. He complained that after taking hot food he felt very weak, and stated that he had been unable to work since the onset of the illness. One week after onset he noted twitching of the muscles all over the body but especially in the legs, accompanied by a sensation of blood running through the affected parts. He states that at the time he occasionally had difficulty in voiding urine and was also constipated. He had cramps in the abdomen on urination or defecation. He had pains in the legs and shoulders and to a lesser extent all over the body. There were some tingling sensations in the hands and feet. There was slight loss of weight. He was sleeping rather badly. No circulatory, renal or digestive symptoms.

The patient had whooping cough and scarlet fever as a child. He had been in the United States eight years and had not been sick in that time. He denied venereal infection. He only occasionally takes alcohol and then in the form of beer. He smokes about forty cigarettes a week. He has been a polisher of silver plated ware for several years; this does not subject him to metallic poisoning.

The family history was negative. The patient's parents were dead of unknown causes. He has one brother and one sister alive and well. He married at twenty-two, and has three healthy children. His wife has had no miscarriages.

Examination shows a very poorly nourished individual. The malar eminences are prominent. The eyes are sunken and the lids are dark. The skin is sallow. The patient is sweating profusely. The pupils react to light and accommodation. There is no nystagmus. No facial or ocular paralyses are present. The tongue is flabby and heavily coated in the center. The throat is congested and oedematous, but the tonsils are not enlarged. The teeth are in good condition except for a slight gingivitis. There is no lead line on the gums. The thyroid gland is normal in size. There are a few slightly enlarged cervical lymph nodes on each side. The chest is emaciated and the supraclavicular fossae are depressed. The percussion note is slightly impaired at each apex and the breathing is harsher than normal, but there are no rales even on coughing. The heart

sounds are rather distant but clear; there is no enlargement of the heart by percussion. The blood pressure is 130/84. The abdomen is soft and the liver can be palpated at the costal margin. The spleen is not palpable. The lower pole of the right kidney is easily palpable. There are no masses in the abdomen. No scars seen on the genitalia. The testes are normal. There is no oedema of the shins.

Almost all the muscles showed marked changes. The myotatic irritability is increased in all the limb, face and trunk muscles. All over the body there appear, at intervals of a few seconds, sudden sharp contractions of groups of muscle fibers. These are much coarser than the fibrillary tremors of muscle atrophy. They are symmetrical but not synchronous. They involve groups of muscle fibers but not whole muscles. They do not result in movements of a limb or even of the fingers or toes. The patient is conscious of them and describes his sensation as blood running through the affected part. The muscles of the limbs are most affected, especially the lower limbs, those of the face less affected, and the eye muscles are not affected at all. Voluntary movement of a limb temporarily suspends the contractions. It was not noted whether they ceased in sleep. The electrical reactions were normal. Exposure to cold, excitement and mechanical irritation of the skin increased the movements.

The examination of the nervous system was practically negative. No sensory disturbances to touch, pain or temperature were present. There were no paralyses. The reflexes were all lively, but no pathological reflexes were present. Coördination was normal. There were no psychic changes.

The Wassermann reaction on the blood and spinal fluid was negative. The spinal fluid was clear and not under pressure. The Nonne test was negative, no cells seen.

The patient passed 740 cubic centimeters of urine in 24 hours. It was amber, clear, acid, with a specific gravity of 1026, a very faint trace of albumen and no sugar. Microscopically there were a few pus cells, but no casts. The examination by Dr. Underhill showed no creatin, creatinin 1.10 grams and nitrogen 11.06 grams. in the 24-hour specimen. The hydrogen ion concentration was 6. The patient did not stay for further observation.

An examination of the feces by Dr. Underhill showed that no lead was present.

The blood showed 85 per cent of hemoglobin with 11,800 leucocytes. A differential count showed polymorphonuclears 72 per cent, large mononuclears, 5 per cent and small mononuclears 23 per cent. There was no stippling of the red cells.

An X-ray examination of the chest by Dr. Honeij showed no tuberculosis.

The patient left the hospital unimproved. During his stay the temperature ranged between F. 98 and F. 99, his pulse between 98 and 113, and his respiration between 20 and 23.

In order to compare this case with those so far reported a brief history of the condition is appended.

The etiology is obscure. Three quarters of the patients are males. Emotion, particularly fright, trauma, and in our case physical strain, directly preceded the onset of the disease in some instances. Tuberculosis has been described in a few patients, but in view of the prevalence of the disease this is probably coincidence. Lead poisoning was present in one reported case. Thyroid and parathyroid insufficiency have both been suggested.

The pathology is obscure as there have been but few autopsies. Degenerative changes in the cells of the anterior gray horns have been described but competent authorities differ as to the interpretation of the findings. Hunt found muscle fiber hypertrophy in his case. Some have ascribed the disease to peripheral muscular changes and a few believe cerebral lesions can explain it, but the consensus of opinion is to the effect that it is probably in the true organic cases a disease of the anterior gray horns of the cord.

The symptoms vary in different cases and it seems clear that the condition may appear as a manifestation of either functional or organic disease of the nervous system or as an isolated phenomenon of obscure origin and for the present regarded as idiopathic.

Since Friedrich's description, which was based on a single case, various groups of patients have been recognized. We may roughly classify them as follows:

1. Cases of the Friedrich type.
2. Cases associated with functional nervous diseases such as hysteria or psychasthenia.
3. Cases associated with epilepsy.
4. Cases with sensory phenomena.
5. Cases associated with definite infections such as poliomyelitis.
6. Cases associated with mental deterioration (dementia).

Dana places cases confused with tic convulsif and a choreic type as separate subheadings but this hardly seems necessary as we are here dealing with errors in diagnosis, the muscle movements both in tic convulsif and chorea being quite different from those occurring in true myokimia. It is true that so-called chorea electrica is probably the same condition as myoclonia.

Stripped of the manifestations which are possibly chargeable to accompanying but independent disease the essential phenomenon of myokimia is the occurrence of sudden clonic contractions in single muscles or in

groups of muscle fibers. The muscles of the limbs are mainly affected, those of the face and trunk less often, the ocular muscles seldom if at all. The contractions are bilateral in distribution, but the same muscle does not contract simultaneously on both sides except on rare occasions. Voluntary motion usually tends to lessen but may increase the contractions; emotion, exposure to cold, and skin stimulation tend to increase them. During sleep they usually, but not invariably, disappear. The muscles react normally to electricity. Aside from the muscle change there is little of moment abnormal. Motion, sensation, mentality and coördination are usually normal. The reflexes are often exaggerated, but not necessarily so, and there are no pathological reflexes.

Of the variants from Friedrich's original picture two deserve special mention, namely the form associated with epilepsy and the cases associated with sensory phenomena.

The form associated with epilepsy was first described by Unverricht in his classical work on myoclonia published in 1891. These cases show a tendency to occur as a familial disease and the myoclonia occurs in the intervals between attacks.

The patients showing sensory disturbances constitute, according to Bastianelli, a separate group. They were described by Biancone who gave this form of myoclonus the name myokimia. Our patient belongs with this group in whom there is a special tendency to involvement of the face muscles as well as paraesthesiae and sometimes paralgesiae.

The diagnosis of myoclonus is not difficult but it may, at times, be hard to differentiate the neurasthenic or hysterical cases from those on an organic basis. In cases such as ours, where only groups of muscle fibers not subject to the will are involved, a functional origin is hardly conceivable. Where whole muscles are involved the differentiation may be more difficult but functional neuroses, except tic, are likely to involve synergic groups of muscles and moreover other signs of hysteria or psychasthenia are present. The epileptic subtype is, of course, easy to separate, and the so-called chorea electrica is held by many to be the same disease under a different name.

The prognosis of myoclonus is generally bad so far as recovery is concerned. Occasional recoveries are on record, but even these are dubious as remissions and subsequent relapses may occur. Usually the disease progresses slowly and at times ends fatally without complications.

Treatment is most unsatisfactory. An exciting cause should be sought for and removed if possible. Hydrotherapy and electricity alone or in combination seem the most satisfactory treatments. Various sedatives have been advised but their efficacy is very doubtful.

GRACE HOSPITAL.

Drs. W. E. Butler and T. H. Russell operated on three cases of exophthalmic goiter. A brief history of the first case is as follows:

Mrs. S. M., age 33 years. This person had a goiter at the age of 16 which disappeared. Her maternal aunt and two of her cousins also had goiters. The second goiter appeared about one and one-half years ago, after giving birth to a child. Symptoms of hyperthyroidism developed at this time, viz., mental excitation, loss of strength, tremor, nervous excitability, tachycardia, dyspnœa, palpitation, loss of weight, a sense of heat with a tendency to perspire freely, nausea and vomiting with diarrhœa, also exophthalmos, pulse ran from 110 to 120. The right lobe is larger than the left. There was a loss of 30 pounds in weight, most of which has been recovered, making her at this time a good operative risk.

Cases two and three were typical exophthalmic cases showing the usual classical symptoms. Pool's method of excision was followed in all three cases. After the operations were completed a number of post-operative cases were exhibited, demonstrating the value of the low collar incision and the good cosmetic results obtained.

Dr. E. H. Arnold showed the following cases:

A Case of Tubercular Spondylitis and a Case of Hip Joint Disease.

E. H. ARNOLD, M.D.

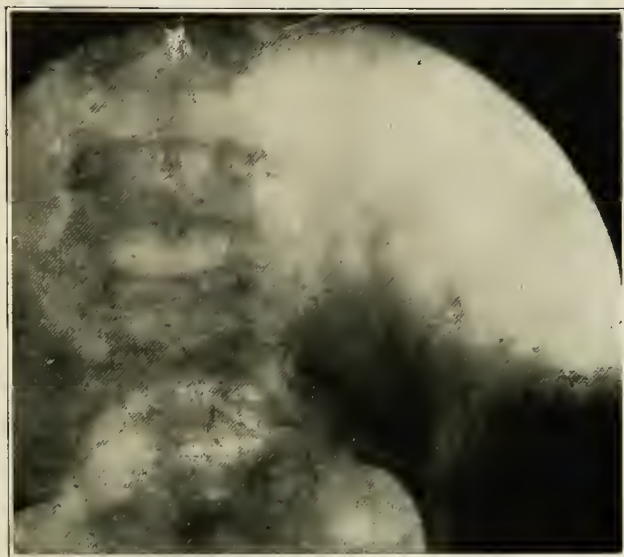
Case I.—Abraham S., age 14. Was first seen October 1, 1912. At that time he had been in a hospital for two months with pain in the back which had started three months previous.

Examination.—Examination revealed a distinct gibbus in the upper dorsal region and some rigidity of the spine.

Diagnosis.—The diagnosis of tubercular spondylitis was made.

Treatment.—The treatment advised was a corset and neck support on account of the height of the lesion. This being declined, bone graft was advised and done on October 23, 1912. The recovery was prompt and uninterrupted. The boy was normal in every way and was not seen again till April 1st of this year. At this time, he came complaining of the body leaning over badly to one side, of pain in the side and of the legs giving out,—he stumbled frequently.

X-ray.—An X-ray, plate 1, revealed a distinct destruction of the fifth lumbar vertebra and involvement of the articular surfaces between fourth and fifth lumbar, lesions in the sacro lumbar joints, rarefaction throughout the sacrum and involvement of the sacro iliac joints.



Case I.



Case II.

The case presents lateral and forward sliding off of the spine from the sacrum, pressure being caused thereby on the cauda equina. He has had more or less anaesthesia, this being no wise constant. He has had reflexes undisturbed, exaggerated, and diminished at different times, according to the amount of pressure present. He has had loss of muscular sense as evidenced by his stumbling and falling. He has had constipation and retention of gas, the latter to considerable extent which is also shown in the X-ray. At times passage of gas has been involuntary. He has had spasms of the muscles of the leg, especially on excitation of the sole of the foot. His symptoms have been ameliorated when he was placed in a plaster of Paris bed and kept there for about a month.

The present operation is being done to stabilize the fourth and fifth vertebrae onto the sacrum, to impart more vigorous bone growth to the sacrum. Whether later a transverse graft across from the sacrum to the ilia will be necessary remains to be seen.

This being the second attack of tuberculosis in the case, the prognosis for the success of the operation is not as good as the first nor is the chance for general recovery as good.

Operation.—A bone graft 4 inches long being removed from the shin bone of the right leg, the spinous processes of the third, fourth and fifth lumbar vertebrae and the first two spinous processes of the sacrum were split longitudinally, the graft inserted into the trough, muscle and fascia sewed over with kangaroo tendon, the skin closed with No. 1 catgut continuous suture.

Case II.—Elizabeth B., age 9. Was first seen December 4, 1915. She was brought to the Derby Hospital suffering with some pain and swelling in the right hip but mainly from uncontrollable bleeding from the nose, mouth and gums. A petechial rash appeared on the second or third day at which time I was called in consultation and made the diagnosis of purpura haemorrhagica, based upon the condition of the hip. The hip was not opened at that time for fear of getting uncontrollable bleeding on account of the hemorrhagic condition.

Treatment.—She was treated by rest, nourishing food, calcium and phylacogen, under which treatment the hemorrhagic symptoms stopped. The hip swelling became enormous, was finally tapped and pus evacuated, after which the patient became much more comfortable and allowing of manipulation of the hip for diagnostic purposes which had been, heretofore, on account of great pain and the precarious condition, not possible.

Diagnosis.—The diagnosis of hip joint disease was made.

Treatment.—Extension was applied and later a brace. The patient has been doing well till about a month ago when she was brought on account of a sinus on the posterior aspect of the right ilium and considerable leaning over of the trunk.

X-ray.—An X-ray, plate 2, reveals the destruction with crushing in of the fifth lumbar vertebra and also the upper part of the sacrum.

Treatment.—The operation is undertaken to fixate the lumbar spine on the sacrum. Whether transverse graft will be necessary later on, remains to be seen. The local prognosis is good, the general prognosis, of course, grave.

Operation.—A bone graft $3\frac{1}{2}$ inches long being removed from the shin bone of the right leg, the spinous processes of the third, fourth and fifth lumbar vertebrae and the first two spinous processes of the sacrum were split longitudinally, the graft inserted into the trough, muscle and fascia sewed over with kangaroo tendon, the skin closed with No. 1 catgut continuous suture.

PAPERS READ AT COUNTY
MEETINGS.

Papers Read at County Meetings:

HARTFORD COUNTY.

October 24, 1916.

PAPERS :

An Explanation of the Amendment of the Food and Drug Act. Frank H. Stadtmueller.

A Case of Traumatic Perforation of the Uterus. Dr. M. W. Maloney.
Discussion opened by Dr. Herman Strosser.

The Orthopedic Treatment of Infantile Paralysis. Dr. Paul P. Swett.
The Treatment of Diabetes. Dr. Elliott P. Joslin, Assistant Professor of Medicine, Harvard Medical School.

Dr. Joslin will present his paper at about 5 P. M.

April 3, 1917.

PRESIDENT'S ADDRESS: Dr. George R. Miller.

PAPERS :

Presentation of Cases; Report of Treatment of Bladder Growths by High Frequency Current. Dr. James J. Boucher.

Discussion opened by Dr. Thomas N. Hepburn.

Radium in Gynecology, and a Lantern Slide Demonstration of Superficial Growths. Dr. Arthur C. Heublein.

Discussion opened by Dr. Lewis I. Mason, Willimantic, Dr. Everett J. McKnight, Hartford.

The Use of Tests of Renal Function in Cases of Nephritis. Dr. Henry A. Christian, Professor of Medicine, Harvard University.

NEW HAVEN COUNTY.

October 26, 1916.

PRESIDENT'S ADDRESS :

Osteoplastic Resection of the Superior Maxilla for the Removal of Nasal and Pharyngeal Neoplasms. Dr. William F. Verdi, New Haven.

LITERARY EXERCISES :

Local Anesthesia in Rectal Work. Dr. Edwin H. Johnson, Naugatuck.
The Complement Fixation Test in Pulmonary Tuberculosis. Dr. William M. Stockwell, The Hartford Sanatorium.

The Treatment of Typhoid Fever by Vaccines. Dr. Frederick P. Gay, The University of California.

The Fasting Treatment of Diabetes from the Viewpoint of the General Practitioner. Dr. Reginald Fitz, The Rockefeller Institute, New York City.

April 26, 1917.

LITERARY EXERCISES :

Medical Problems Affecting Industrial Workers. Dr. George M. Smith, Waterbury.

Discussion opened by Dr. Nelson A. Pomeroy, Waterbury.

Some Problems of a Field between Official and Professional Control.

Mr. Frederick M. Williams, Compensation Commissioner, Waterbury.

Discussion opened by Dr. E. Reed Whittemore, New Haven.

Opportunities of Modern Medicine. Dr. Eugene Lyman Fisk, New York City, Director of Hygiene, Life Extension Institute, Inc.

Discussion opened by Prof. C.-E. A. Winslow, Public Health Department, Yale University.

NEW LONDON COUNTY.

October 5, 1916.

READING OF PAPERS :

Anterior Poliomyelitis. Dr. J. T. Black, Secretary of the State Board of Health.

April 5, 1917.

READING OF PAPERS :

Sciatica. Dr. Paul P. Swett, Hartford.

FAIRFIELD COUNTY.

October 10, 1916.

VICE-PRESIDENT'S ADDRESS.

Tests of Renal Function from the Standpoint of the General Practitioner. Dr. F. M. Tukey, Bridgeport.

PAPERS :

The Diagnosis and Modern Treatment of Syphilis. Dr. Frederick W. Smith, New York.

The Ocular Symptoms of Syphilis. Dr. John Waite Avery, Stamford.

April 10, 1917.

PRESIDENT'S ADDRESS.

Medical Ethics. Dr. F. H. Barnes, Stamford.

PAPERS :

A Discussion on the Various Psycho-Neuroses. Dr. Graeme M. Hammond.

Discussion opened by Dr. C. N. Haskell.

The Functional Neuroses. Dr. Robert T. Morris.

Discussion opened by Dr. G. W. Hawley.

WINDHAM COUNTY.

October 19, 1916.

PAPERS:

- Some Observations on Infantile Paralysis. Dr. Harry L. F. Locke, Isolation Hospital, Hartford.
- The Burden which the Unfit lays upon the Fit. Dr. Rienzi Robinson, Danielson.
- The Cystoscope as a means of Diagnosis in Diseases of the Kidney, Ureters and Bladder. Dr. J. Arthur Girouard, Willimantic.

April 19, 1917.

PAPERS AND DISCUSSIONS:

- Study of Renal Functional Capacity. Dr. J. Arthur Girouard, Willimantic.
- Some Sociological, Economic and Medical Aspects of Syphilis, with lantern slide demonstrations. Dr. Henry F. Stoll, Hartford.

LITCHFIELD COUNTY.

(In conjunction with the Semi-Annual Meeting of the Connecticut State Medical Society.)

October 3, 1916.

PAPERS:

- Observations on Recent Cases of Infantile Paralysis in New Haven. Dr. Joseph I. Linde, New Haven.
- Postpartum Hemorrhage. Dr. Herbert K. Thoms, New Haven.

April 24, 1917.

PRESIDENT'S ADDRESS: Dr. D. D. Reidy, Winsted.

PAPERS:

- Some Things We Can Learn from France. Dr. A. A. Crane, Waterbury.
- Diagnostic Value of Pains in the Abdomen. Dr. C. G. Heyd, New York City.
- Organization of the County into a Military Sanitation Unit. Dr. J. B. McCook, Hartford.
- Disordered Digestion of Childhood. Dr. H. W. Brayton, Hartford.

MIDDLESEX COUNTY.

October 12, 1916.

PRESIDENT'S ADDRESS: Dr. Samuel M. Garlick, Bridgeport.

PAPERS:

- Observations on Recent Cases of Infantile Paralysis in New Haven. Dr. Joseph I. Linde, New Haven.

Report of Cases of Infantile Paralysis. Dr. F. T. Fitch, East Hampton.
Preventive Treatment of Otitis Media. Dr. Sheldon S. S. Campbell,
Collinsville.

Report of Unusual Case. Dr. Leonard J. Loewe, Haddam.

April 12, 1917.

PAPERS:

Some of the Economic, Sociological, and Medical Aspects of Syphilis.
Dr. Henry F. Stoll, Hartford.

Skin Lesions of Syphilis. Dr. R. A. McDonnell, New Haven.

Wassermann Disappointments. Dr. Jessie W. Fisher, Middletown.

Differentiation between Paresis and Vascular Syphilis. Dr. E. G.
Gibson.

Discussion of papers by Drs. A. B. Coleburn, Irwin Grannis and
D. A. Nolan.

TOLLAND COUNTY.

October 17, 1916.

PAPERS AND DISCUSSIONS:

Laws Relating to Milk and Other Foods. Frank H. Stadtmueller, Con-
necticut State Dairy and Food Commissioner.

Increasing Our Membership and Efficiency in General Practice. Dr.
Samuel M. Garlick, President Connecticut State Medical Society.

Poliomyelitis in Connecticut. Dr. John T. Black, New London, Secre-
tary Connecticut State Board of Health.

Comparison of Medicines and Instruments and Various Accessories in
the Practice of Medicine Past and Present. Dr. Cyrus B. Newton,
Stafford Springs.

Some Professional Observations Respecting "The Mother of the
Family." Dr. Gideon C. Segur, Hartford.

Observations on the Present Day Practice of Obstetrics and Midwifery.
Dr. Samuel M. Garlick.

State Board of Charities: Its Relation to the Insane and Unfit. Dr.
E. A. Down, Hartford, Chairman of the Board.

April 17, 1917.

PAPERS:

The Toxaemias of Pregnancy: Their Management with Prognosis for
the Mother: Care of the Baby. Dr. Orin R. Witter, Hartford.

Public Health Problems of Connecticut. C.-E. A. Winslow, Anna M. R.
Lauder Professor of Public Health, Yale University School of Medi-
cine.

Treatment of Poliomyelitis. Dr. Isaac P. Fiske, Coventry.

County Report "Typho-Malaria." Dr. Cyrus B. Newton, Stafford
Springs.

OBITUARIES.

Jean Dumortier, M.D., South Norwalk.

SAMUEL H. HUNTINGTON, M.D., NORWALK.

Dr. Jean Dumortier died suddenly at his home in South Norwalk on December 13, 1916.

About six months before his death he was attacked by multiple neuritis. The disease progressed slowly but steadily while he continued his work without complaint until the month of September, when, physically exhausted and mentally depressed, he sought rest and change of scene in a trip to Atlantic City. Here serious abdominal complications first attracted his attention, causing him to return home and submit to operation for removal of the gall bladder. After the operation, from which he made a good recovery with marked improvement in digestion and relief of abdominal distress, he hoped to again resume his work, but the neuritis still continued, in fact seemed increasing in severity.

Worn out by pain and insomnia, one winter morning, after a night of suffering he slept,—

"The sleep that knows not breaking,
Morn of toil, nor night of waking."

Dr. Dumortier was born in the Flemish town of Avelghem in Belgium on August 13, 1865. His early education was acquired in the Atheneum, Tournai, Belgium. He graduated from the Atheneum at the age of eighteen and entered the University of Ghent, attending the academic and later the medical course. His standing was high; at the time of graduation he stood at the head of his class. He graduated in medicine and surgery, July 7, 1890, his diploma states, "avec tres plus Grande Distinction."

He won a prize scholarship, which enabled him to pursue a post-graduate course of study in surgery at clinics in Brussels, Vienna, Berlin, Paris and London. He served for about two years as surgeon on the ships of the Red Star Line, sailing between Antwerp and New York and Philadelphia. Having resolved that America should be his home and the field of his life

work, he came to South Norwalk in 1895, where he resided until his death.

He married, June 14, 1900, Mabel H. Beers of South Norwalk. They had two children, a son and a daughter.

In the summer of 1914 he attended the International Congress of Surgeons in London and for the first time in twenty-five years visited his friends and relatives in Belgium. When he left Belgium to return home that country was peaceful, prosperous, and happy, but on arriving in London he was greeted by the news that the peaceful country he had just left was plunged in the horrors of the German invasion.

Anxiety regarding near relatives suffering the hardships of war whom he could neither relieve or communicate with no doubt contributed in part to the nervous breakdown of his last days.

Dr. Dumortier was a respected citizen of the community in which he lived, actively interested in all public movements. As a surgeon he won an enviable reputation by hard study, enthusiasm and close application to his work. That his studies embraced a wider range than mere professional reading was shown by his acquirements as a linguist, he being able to speak fluently no less than five languages. He was a member of the American Medical Association, the Connecticut State Medical Society, the Norwalk Medical Association, and the Medical Staff of the Norwalk Hospital. Also he was a corresponding member of various European medical and scientific societies. His untimely death is a distinct loss to the community, to the medical profession and to this Society.

Josaphat A. Gaucher, M.D., Willimantic.

CHARLES A. JENKINS, M.D., WILLIMANTIC.

Josaphat A. Gaucher was born in Taftville, Conn., Oct. 16, 1890, his parents being H. A. and Regina (Freteau) Gaucher. He received his early education in Mariville, Canada, and entered the Baltimore Medical College in the fall of 1908. After receiving his degree in 1912, he spent a year as intern at St. Francis' Hospital, Hartford, Conn. In 1913 he came to Willimantic as locum tenens for Dr. J. A. Girouard, who went abroad for study.

He was married Aug. 9, 1915, to Lorette Routhier, who survives.

Dr. Gaucher was a member of the American Medical Association, the Connecticut Medical Society, the Windham County Medical Society and the Willimantic City Medical Society.

On the return of Dr. Girouard from Europe, Nov., 1915, Dr. Gaucher moved to Putnam, Conn., and there continued the practice of his profession until his death.

Dr. Gaucher was one of the promising young physicians of the State, being ambitious, with a strong desire to be successful. This desire forced him to ignore a slight attack of influenza in December, 1916, which developed into an attack of lobar pneumonia, causing his death Tuesday, December 19, 1916.

Frederick Gilnack, M.D., Rockville.

ELI P. FLINT, M.D., ROCKVILLE.

Dr. Frederick Gilnack was born in Saxony, Germany, September 4, 1844, the son of Valentine and Dorothea Gilnack, and died January 3, 1917, at his home in Rockville, Connecticut.

His family came to the United States when he was ten years old and located in Glastonbury, this State, where his brother, Henry F. Gilnack, still resides.

Dr. Gilnack's early life was uneventful and fully in accord with the evenness of temper and temperament and absence of contention which characterized so markedly his later years.

His early education was acquired in the Glastonbury public schools, at the Buck Select School at East Glastonbury, and the South Glastonbury Academy.

He was graduated from the College of Physicians and Surgeons, the School of Medicine of Columbia University, New York, March 14, 1867, and only three months later, in June, he located in Rockville, Connecticut, for the practice of his profession, which he continued there successfully, for forty-five years, until failing health obliged him to give it up.

He was especially successful as an obstetrician, and the loss of sleep and other exacting requirements which that class of practice necessitates, so lowered his vitality mentally and physically that he became unable to perform the duties of his profession for five years, until an attack of epidemic influenza proved quickly fatal.

He married in 1874, Anna Belle Mosgrove of Glastonbury, who still survives him. There are also two daughters, Mrs. Edward C. Bell of Unionville, this State, and Mrs. Galen W. Hill of Fair Haven, Massachusetts, and two grandsons and one granddaughter.

Dr. Gilnack's practice allowed him little time for public service and with his quiet characteristics he never sought public office.

He was a member of the First Congregational Church of Rock-

ville and of the Union Church after the two churches united, and served well his church as he had opportunity. He was, for a time, superintendent of the Sunday school, and for many years one of the board of deacons.

It has been said that the life of an honorable and just man furnishes little material for history.

Napoleon, sacrificing the lives and interests of others for his own selfish ambition, added volumes to the history of nations.

Lincoln has been spoken of as having had an Old Testament conscience and a New Testament heart. It seems to me that that would describe well the subject of this sketch. Unswervingly honorable in all his relations with his fellow men and sincerely devoted to his profession, there was never occasion to criticize his words or his acts.

During a long and intimate acquaintance, I do not recall ever hearing him speak an angry or unkind word or say anything unkindly critical of any human being.

In fact it would be difficult to find a more typical example of the Christian gentleman devoting his life in service to his fellow men and sacrificing it for them.

He needs no poet to sing his worth,
No sculptor to chisel his deeds,
They're impressed on the hearts of the people of earth,
For he ministered to their needs.

Fred P. Lane.

JEREMIAH BARRETT SULLIVAN, M.D., NEW HAVEN.

On January 14, 1917, Dr. Fred P. Lane died of double pneumonia after an illness of five days at the age of thirty-six. He was born in Rochester, New York, the son of Fred A. and Mary C. Lane.

He was a graduate of the Yale Medical School, 1904, completed his term as interne at the New Haven Hospital, and did graduate work at the Lying-in-Hospital in New York City.

He started in the practice of medicine and surgery in New Haven and from the beginning he was very successful and was early regarded by his colleagues as one of the most successful of the younger members.

He was a member of the New Haven City, New Haven County and the Connecticut Medical Societies, and the American Surgical Congress. He was a thirty-second degree Mason.

In January, 1911, he was appointed as an assistant to the Surgical Staff of St. Raphael's Hospital and in 1915 he was made an attending surgeon.

Dr. Lane was rapidly rising to the first rank in surgery.

In his hospital work, as in his private practice, he was exceedingly conscientious and painstaking and was held in high esteem by his patients and associates. He was of a strong, forceful and yet kindly nature and his work reflected these characteristics. One of his chief traits was an unusual filial devotion to his mother.

Fond of travel, Dr. Lane visited Europe, Japan and the Orient and practically all parts of the United States.

A few years only were allowed Dr. Lane to pursue his work in his chosen profession, but they were years of promise, hard work and progress; years teeming with good cheer and kindness for his fellow man.

His untimely death is a distinct loss to the medical profession, to the community and to this society.

George Dallas Stanton, M.D., Stonington, Conn.

WILLIAM H. GRAY, M.D., MYSTIC.

George Dallas Stanton, M.D., son of Major Samuel M. and Matilda Stanton, was born in Charlestown, R. I., April 13, 1839. He was a lineal descendant in the seventh generation of Thomas Stanton, the Indian interpreter. When he was five years old, his family removed to Stonington, Conn., where he resided until the time of his death. He attended the public schools of the town until his thirteenth year when he entered the private school of Dr. David Hart, a noted educator of his day. In 1859 he began the study of medicine with the late Dr. William Hyde, with whom he remained until 1861 when he entered the University of Bellevue, from which he was graduated in 1865. While at Bellevue, he attended the private class of Dr. Austin Flint in Auscultation and Percussion, and a special course in surgery under Dr. Hamilton.

Dr. Stanton began his general practice in Stonington in 1866, where his recognized professional ability, personal qualities and unflinching adherence to the old school professional courtesy, soon won for him a large clientage, and a great body of friends. In 1883 he was appointed the local Medical Examiner. So satisfactorily did he administer the duties of this position, that he retained the office for thirty-three years, until his resignation in 1916. Dr. Stanton also held the office of Post Surgeon for this district for a number of years, resigning in 1916 because of ill health. Dr. Stanton was esteemed highly by the medical profession, and his advice was often sought by the younger members. He was a member of the State and County Medical Societies.

Dr. Stanton was always keenly alive to public affairs. For some time he served as Warden of the Borough of Stonington, and as Selectman of the town. In politics, in which he took a great interest, he was a staunch Democrat. Fraternally, he was a Past Master of Stonington Lodge, F. and A. M., and a member of the Grand Lodge of Connecticut.

Dr. Stanton died Nov. 3, 1916, after an illness of some months. He is survived by his wife, Anna Palmer Stanton, the daughter of the late George E. Palmer, M.D., to whom he was married in 1875, and by one son. A man of few words but strong convictions, a loyal friend and a skilled physician, his loss is felt by his colleagues, his patients, and the whole community.

CHARTER AND BY-LAWS.

Resolution Amending the Charter of the Connecticut Medical Society.

GENERAL ASSEMBLY.

JANUARY SESSION, A.D. 1905

Resolved by this assembly:

Section 1. That the charter of the Connecticut Medical Society, approved June 5, 1834, and as the same has been amended from time to time, be and the same is hereby amended so as to read as follows:

That all persons who are now members of the Connecticut Medical Society and all physicians and surgeons who shall hereafter be associated with them in pursuance of the provisions of this resolution shall be and remain a body politic and corporate by the name of The Connecticut State Medical Society; and by that name they and their successors shall and may have perpetual succession; shall be capable of suing and being sued, pleading and being impleaded, in all suits of whatever name and nature; may have a common seal and may alter the same at pleasure; and may also purchase, receive, hold, and convey any estate, real and personal, to an amount not exceeding one hundred thousand dollars.

Sec. 2. The superintendence and management of the corporation shall be vested in a board to be known and called by the name of The House of Delegates of The Connecticut State Medical Society, which board shall have power to establish offices in said corporation and prescribe the duties of the several officers and of the members of said corporation and may fix their compensation; to establish the conditions of admission to and dismissal and expulsion from said society; to lay a tax from time to time upon the members, not exceeding five dollars in each year, and to collect the same; to hold and dispose of all moneys and other property belonging to the corporation in such manner as they may deem proper to promote the objects and interests of the society; and in general to make such by-laws and regulations for the due government of the society, not repugnant to the laws of the United States or of this state, as may be deemed necessary.

Sec. 3. The House of Delegates of The Connecticut State Medical Society shall be composed of, (1) ex officio, the president and secretary of the society; (2) delegates to be elected annually as hereinafter provided, by the several county medical associations in this state which heretofore have been and now are affiliated with The Connecticut Medical Society; and (3) eight councilors to be elected from time to time as hereinafter provided.

Sec. 4. An annual meeting of the corporation for the election of officers and such other business as may from time to time arise, shall be held during the month of May in each year and upon such day in said month as the House of Delegates shall from time to time prescribe.

Sec. 5. At a meeting to be held at least twenty days in advance of the annual meeting of the corporation in each year, every affiliated county association shall elect a delegate or delegates to represent it in the House of Delegates of this society in the proportion of one delegate to each thirty-five members, or any part of that number, and the secretary of such affiliated county association shall send a list of such delegates to the secretary of this corporation at least twenty days before the date of said annual meeting.

Sec. 6. The first councilors shall be appointed by the president, one from each county, who shall serve for one year or until their successors shall be elected. At their annual meeting in the year 1906, each affiliated county medical association shall elect one councilor, of whom those elected in Hartford, New London, Windham, and Middlesex counties shall serve for one year, and those elected in New Haven, Fairfield, Litchfield and Tolland counties shall serve for two years; and at the expiration of the term of office of the councilors so elected, each affiliated county medical association shall, biennially thereafter, elect a councilor, who shall serve for two years.

Sec. 7. The secretary of every affiliated county medical association in this state shall, in May, 1905, and annually thereafter, at least ten days before the annual meeting of the society, file with its secretary a list of all members of said respective county associations who are at the time in good and regular standing, and thereupon all such persons shall become and be members of The Connecticut State Medical Society without further action.

The Connecticut State Medical Society.

BY-LAWS.

CHAPTER I.

Section 1. Name. The name and title of this organization shall be The Connecticut State Medical Society.

Sec. 2. Purposes of the Society. The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of Connecticut, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of State medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

Sec. 3. Component Associations. Component Associations shall consist of those county medical associations which heretofore have been and now are affiliated with The Connecticut Medical Society.

Sec. 4. Composition of Society. This Society shall consist of members, delegates, guests, and honorary members.

Sec. 5. Members. Members of this Society shall be members of the component county medical associations.

Sec. 6. Delegates. (1) Delegates shall be those members who are elected by the component county associations; (2) the Councilors; their respective component associations in the House of Delegates of this Society.

Sec. 7. Guests. Any distinguished physician not a resident of this State who is a member of his own State Association, may become a guest during any annual session on invitation of

the officers of this Society and shall be accorded the privilege of participating in all the scientific work for that session.

Sec. 8. Honorary Members. Eminent physicians, not residents of this State, may be elected Honorary Members by a major vote of the House of Delegates after nomination of one year, but such shall not exceed three in any one year.

Honorary Members shall have all the privileges accorded by Section 7 to guests.

CHAPTER II.—MEMBERSHIP.

Section 1. The name of a physician upon the properly certified roster of members of a component association, who has paid his annual assessment, shall be prima facie evidence of membership in this Society.

The annual tax shall be collected from all such members except the secretaries of County Medical Associations, but the taxes of any member may be remitted by vote of the House of Delegates upon recommendation of any County Medical Association.

Sec. 2. Any person who is under sentence of suspension or expulsion from a component association, or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of the Society, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component association of which he is a member.

CHAPTER III.—HOUSE OF DELEGATES.

Section 1. The House of Delegates shall be the legislative and business body of the Society, and shall consist of (1) delegates elected by the component county associations; (2) the Councilors; and (3), ex officio, the President and Secretary of this Society.

Sec. 2. The House of Delegates shall meet on the first day of the annual session. It may adjourn from time to time as may be

necessary to complete its business, provided that its hours shall conflict as little as possible with the General Meetings. The order of business shall be arranged as a separate section of the programme,

Sec. 3. Each component association shall be entitled to send to the House of Delegates each year, one delegate for every thirty-five members, or any part of that number.

Sec. 4. Fifteen delegates shall constitute a quorum.

Sec. 5. It shall, through its officers, Council, and otherwise, give diligent attention to and foster the scientific work and spirit of the Society, and shall constantly strive to make each annual session a stepping-stone to further advancement.

Sec. 6. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Sec. 7. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interests in such county associations as already exist and for organizing the profession in counties where associations do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until every physician in every county of the State who can be made reputable has been brought under medical society influence.

Sec. 8. It shall encourage post-graduate and research work, as well as home study, and shall endeavor to have the results discussed and utilized.

Sec. 9. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Sec. 10. It shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of Delegates.

Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

Sec. 11. It shall approve all memorials and resolutions issued in the name of the Society before the same shall become effective.

Sec. 12. Sections and District Societies. The House of Delegates may provide for a division of the scientific work of the Society into appropriate sections, and for the organization of such Councilor District Associations as will promote the best interests of the profession, such associations to be composed exclusively of members of component county associations.

CHAPTER IV.—SESSIONS AND MEETINGS.

Section 1. The Society shall hold an annual session, during which there shall be held daily General Meetings which shall be open to all registered members, guests and honorary members.

Sec. 2. The time and place for holding each annual session shall be fixed by the House of Delegates.

Sec. 3. Special meetings of either the Society or the House of Delegates shall be called by the President, on petition of ten (10) delegates or fifty (50) members.

Sec. 4. General Meetings. All registered members may attend and participate in the proceedings and discussions of the General Meetings and of the Sections. The General Meetings shall be presided over by the President or by one of the Vice Presidents, and before them shall be delivered the address of the President and the orations.

Sec. 5. The General Meeting may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and the public.

CHAPTER V.—OFFICERS.

Section 1. The officers of this Society shall be a President, two Vice Presidents, a Secretary, a Treasurer, and eight Councilors.

Sec. 2. The officers, except the Councilors, shall be elected annually. The first Councilors shall be appointed by the President, one from each county, who shall serve for one year, or until their successors shall be elected. At their annual meetings in the year 1906, each affiliated county medical association shall elect one councilor, of whom those elected in Hartford, New London, Windham, and Middlesex counties shall serve for one year, and those elected in New Haven, Fairfield, Litchfield, and Tolland counties shall serve for two years, and at the expiration of the term of office of the councilors so elected, each affiliated county medical association shall, biennially, elect a councilor, who shall serve for two years.

Sec. 3. All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect.

Sec. 4. The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the General Session, but no delegate shall be eligible to any office named in the preceding section except that of councilor, and no person shall be elected for any such office who has not been a member of the Society for the past two years.

CHAPTER VI.—DUTIES OF OFFICERS.

Section 1. The President shall preside at all meetings of the Society and of the House of Delegates; shall appoint all committees not otherwise provided for; shall deliver an annual address at such time as may be arranged, and perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit by appointment the various sections of the State and assist the Councilors in building up the county associations and in making their work more practical and useful.

Sec. 2. The Vice Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation, or removal, the Council shall elect one of the Vice Presidents to succeed him.

Sec. 3. The Treasurer shall give bond in the sum of \$1,000, the manner of bonding to be left to the Council. He shall demand and receive all funds due the Society, together with the bequests and donations. He shall pay money out of the treasury only on a written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands.

Sec. 4. The Secretary shall attend the General Meetings of the Society and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings in separate record books. He shall be ex-officio Secretary of the Council. He shall be custodian of all record books and papers belonging to the Society, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Society which come into his hands. He shall provide for the registration of the members and delegates of the annual sessions. He shall, with the coöperation of the secretaries of the component associations, keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county association, and, on request, shall transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county associations and in the extension of the power and usefulness of this Society. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the House of Delegates, and shall make an annual report to the House of Delegates. He shall supply each component association with the necessary blanks for making their annual reports. Acting with the Committee on Scientific Work, he shall prepare and issue all programmes. The amount of his salary shall be fixed by the Council.

CHAPTER VII.—COUNCIL.

Section 1. The Council shall consist of one Councilor from each county and the President and Secretary ex-officio. It shall be the Finance Committee of the House of Delegates. Five Councilors shall constitute a quorum.

The Board of Councilors shall appoint from its own members two members who, with the Treasurer of the Society, shall constitute a sub-committee to be designated a Committee on the Permanent Funds, whose duty it shall be to advise on the investment of such funds as the Society may have or receive by bequest or donation, according to the laws of the State of Connecticut governing trust funds. This committee shall, through the Chairman of the Council, recommend to the House of Delegates the disposition to be made of the permanent funds, both principal and income.

Sec. 2. The Council shall meet daily during the session, and at such other times as necessity may require, subject to the call of the chairman or on petition of three Councilors. It shall meet on the last day of the annual session of the Society to organize and outline work for the ensuing year. It shall elect a chairman and a clerk, who, in the absence of the Secretary of the Society, shall keep a record of its proceedings. It shall, through its chairman, make an annual report to the House of Delegates.

Sec. 3. The Board of Councilors shall constitute the nominating committee of the Society. They shall report as such to the House of Delegates on the first day of the general session. After the report has been submitted an opportunity shall be given for other nominations to be made.

Sec. 4. Each Councilor shall be organizer, peacemaker, and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component associations where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county associations and their members. He shall make an annual report of his work and of the condition of the profession

of each county in his district at the annual session of the House of Delegates.

Sec. 5. The Council shall be the Board of Censors of the Society. It shall consider all questions involving the rights and standing of members, whether in relation to other members, to the component associations, or to this Society. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or component associations on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

Sec. 6. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Society, and shall have authority to appoint an editor and such assistants as it deems necessary. All money received by the Council and its agents, resulting from the discharge of the duties assigned to them, must be paid to the Treasurer of the Society. As the Finance Committee, it shall annually audit the accounts of the Treasurer and Secretary and other agents of this Society, and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of this Society during the year, and the amount of all other property belonging to the Society under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary or the Treasurer, the Council shall fill the vacancy until the next annual election.

CHAPTER VIII.—COMMITTEES.

Section 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Medical Examination and Medical Education.

A Committee on Honorary Members and Degrees.

A Committee on Arrangements, and such other committees as

may be necessary. Such committees shall be elected by the House of Delegates unless otherwise provided.

Sec. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates. Fifteen days previous to each annual session it shall prepare and issue a programme announcing the order in which papers, discussions and other business shall be presented.

Sec. 3. The Committee on Public Policy and Legislation shall consist of one member from each component association, and the President and Secretary. Under the direction of the House of Delegates it shall represent the Society in securing and enforcing legislation in the interest of the public health and scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local, state, and national affairs and elections.

Sec. 4. The Committee on Medical Examination and Medical Education shall consist of five members, who shall be appointed in accordance with Sec. 4717 of the general statutes of the State of Connecticut. The committee shall conduct the medical examination of candidates for certificates of qualifications for license to practice medicine in the State in accord with the requirements of the Medical Practice Act. It shall annually present a written report to the House of Delegates. The committee shall also be a committee on medical education and shall coöperate with the council of education of the American Medical Association in the effort to elevate the standard of medical education in the United States.

Sec. 5. The Committee on Honorary Members and Degrees may present annually to the House of Delegates the names of not more than three eminent physicians, not residents of this state, as candidates for honorary membership in this Society. Such candidates may be elected honorary members in accordance with the provisions of Chap. I, Sec. 8, of the By-Laws.

Sec. 6. The Committee of Arrangements shall be appointed by the component association in which the annual session is to be held. It shall provide suitable accommodations for the meeting places of the Society and of the House of Delegates, and of their respective committees. Its chairman shall report an outline of the arrangements to the Secretary for publication in the programme, and shall make additional announcements during the session as occasion may require.

CHAPTER IX.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES.

In order to broaden professional fellowship, this Society is ready to arrange with other State Medical Societies for an interchange of certificates of membership, so that members moving from one State to another may avoid the formality of reelection.

CHAPTER X.—FUNDS AND EXPENSES.

Funds shall be raised by an equal per capita assessment on each component association. The amount of the annual assessment per member shall be fixed by the House of Delegates.

Funds may also be raised by voluntary contributions, for the Society's publications, and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Society, for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must be referred to the Finance Committee before action is taken thereon.

CHAPTER XI.—REFERENDUM.

Section 1. A General Meeting of the Society may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Society, who may vote by mail or in person, and, if the members voting shall comprise a majority of all the

members of the Society, a majority of such vote shall determine the question and be binding on the House of Delegates.

Sec. 2. The House of Delegates may, by a two-thirds vote of its members present, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

CHAPTER XII.—COUNTY ASSOCIATIONS.

Section 1. All County Associations now in affiliation with the Connecticut Medical Society shall be component parts of this Society.

Sec. 2. Each County Association shall judge of the qualification of its members, but as such associations are the only portals to this Society and to the American Medical Association, all reputable and legally registered physicians, except those who practice or claim to practice or lend support to any exclusive or irregular system of medicine, shall be entitled to membership.

No physician shall be admitted to or retain membership in a County Medical Association after the expiration of his present contract who has agreed to furnish medical services to any organization or union for a stipulated sum per member, or for other consideration than the regular local fee for such services.

Sec. 3. Any County Medical Association may suspend or expel any member who is guilty of improper or unprofessional conduct, by a two-thirds vote of the members present and voting at any regular meeting, provided due notice has been given on the programme of said meeting at least ten days before its session. When from any cause a member of the Connecticut State Medical Society ceases to be a member of one of the component county medical associations, his membership in The Connecticut State Medical Society shall terminate, but any physician who may feel aggrieved by the action of the association of his county in refusing him membership or in suspending or expelling him, shall have the right to appeal to the Council, and its decisions shall be final.

Sec. 4. In hearing appeals the Council may admit oral or

written evidence as in its judgment will be best and to most fairly present the facts, but in case of every appeal, both as a Board and as individual councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 5. When a member in good standing in a component association moves to another county in this State, his name, on request, shall be transferred, without cost, to the roster of the county into whose jurisdiction he moves.

Sec. 6. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the association in whose jurisdiction he resides.

Sec. 7. Each component association shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral, and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the Society as a whole, to increase the membership until it embraces every qualified physician in the county.

Sec. 8. At some meeting in advance of the annual session of this Society, each county association shall elect a delegate or delegates to represent it in the House of Delegates of this Society in the proportion of one delegate to each thirty-five members, or any part of that number, and the Secretary of the association shall send a list of such delegates to the Secretary of this Society at least twenty days before the annual session.

In the case of death, illness or disability of a Councilor or delegate, the President of the County Association in which the vacancy occurs shall appoint a substitute Councilor or delegate, with full power to represent his county during the Councilor's or delegate's disability, or until the successor of such appointee is elected at the next meeting of the County Medical Association.

Sec. 9. The Secretary of each component association shall keep a roster of its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of registration in

this State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Sec. 10. The fiscal year of the Society shall terminate on April 30 of each year.

On or before May 10 of each year the Secretary of each component association shall make a report to the Treasurer of the Society on a blank provided by the Treasurer for that purpose, stating, 1st, the number of members from his county, and the number exempt; 2d, the total amount collected on the tax of that fiscal year; the amount collected during the year on taxes in arrears; the amount of taxes still in arrears for one year previous; the amount in arrears for two years previous, together with a check to cover the above mentioned collections.

The bills for the tax laid at the annual meeting shall be sent to each member by the respective county clerks on the first day of June of each year.

The clerk of each component association shall forward its roster of officers and list of non-affiliated physicians to the Secretary and Treasurer of this Society each year within five days after the annual session of his county association.

Sec. 11. The several county medical associations shall have power to adjourn; to call special meetings, as they shall deem expedient; and to adopt such by-laws as they find desirable, not contrary to the laws of this State or the charter and by-laws of The Connecticut State Medical Society.

CHAPTER XIII.—MISCELLANEOUS.

Section 1. No address or paper before this Society, except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject except by unanimous consent.

Sec. 2. All papers read before the Society or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when read. No paper shall be read before this Society which has been previously published or read before any other organization.

Sec. 3. The deliberations of this Society shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with the charter and by-laws.

Sec. 4. The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XIV.—AMENDMENTS.

These By-Laws may be amended at any annual session by a majority vote of all delegates present at that session, after the amendment has been laid on the table until the next annual session. If, however, the proposed alteration has been published in the notice of the session, it may be acted upon after it has laid on the table one day.

MEMBERS OF THE
CONNECTICUT STATE MEDICAL
SOCIETY.

MEMBERS OF THE SOCIETY.

HONORARY MEMBERS.

THOMAS ADDIS EMMETT.....	New York City, N. Y.
WILLIAM HENRY WELCH.....	Baltimore, Md.
ROBERT FULTON WEIR.....	New York City, N. Y.
HON. CHARLES E. GROSS.....	Hartford, Conn.
DAVID WEBSTER.....	New York City, N. Y.
SIR JAMES GRANT.....	Ottawa, Canada.
HENRY O. MARCY.....	Boston, Mass.
T. MITCHELL PRUDDEN.....	New York City, N. Y.
WILLIAM W. KEEN.....	Philadelphia, Penn.
J. W. S. GOULEY.....	New York City, N. Y.
REYNOLD WEBB WILCOX.....	New York City, N. Y.
WILLIAM OSLER.....	Oxford, England.
WILLIAM C. GORGAS.....	Washington, D. C.
RICHARD P. STRONG.....	Boston, Mass.
HERMANN M. BIGGS.....	New York City, N. Y.

ACTIVE MEMBERS.

The Names of those who have been Presidents of the
State Society are in Capitals.

HARTFORD COUNTY.

JOHN L. BRIDGE, M.D., Thompsonville, *President*.

GEORGE N. BELL, M.D., Hartford, *Vice President*.

ALBERT R. KEITH, M.D., Hartford, *Secretary*.

Councilor—WALTER R. STEINER, M.D., Hartford.

Censors—STUART E. PHELPS, M.D., JOHN F. DOWLING, M.D.,

H. GILDERSLEEVE JARVIS, M.D.

Annual Meeting, First Tuesday in April; Semi-Annual Meeting,
Fourth Tuesday in October.

Hartford:

David Crary	926 Main Street.
William W. Knight.....	254 Trumbull Street.
Ellen H. Gladwin.....	705 Asylum Avenue.
Frederick S. Crossfield.....	75 Pratt Street.
William D. Morgan.....	49 Pearl Street.
John F. Axtelle.....	635 Main Street.
George K. Welch	26 State Street.
Phineas H. Ingalls.....	49 Pearl Street.
EDWARD K. ROOT.....	49 Pearl Street.
John Howard.....	1337 Main Street.
Charles D. Alton.....	75 Pratt Street.
Joseph E. Root.....	67 Pearl Street.
William Porter, Jr.....	179 Allyn Street.
Frederick T. Simpson.....	122 High Street.
George R. Miller.....	51 Church Street.
Charles C. Beach.....	125 Trumbull Street.
Gideon C. Segur.....	67 Farmington Avenue.
Alva E. Abrams.....	36 Pearl Street.
Charles E. Taft.....	98 High Street.
Thomas F. Kane.....	517 Main Street.
Arthur J. Wolff.....	904 Main Street.
Ansel G. Cook.....	179 Allyn Street.

Edwin A. Down.....	902 Main Street.
Daniel F. Sullivan.....	64 Church Street.
EVERETT J. McKNIGHT.....	110 High Street.
Benjamin S. Barrows.....	164 High Street.
Michael A. Bailey.....	434 Main Street.
George N. Bell.....	44 High Street.
Frank L. Waite.....	68 Pratt Street.
Charles S. Stern.....	75 Pratt Street.
Franklin L. Lawton.....	295 Main Street.
John B. Waters.....	281 Trumbull Street.
Joseph B. Hall.....	36 Pearl Street.
Edward O. Elmer.....	805 Park Street.
Janet M. Weir.....	282 Sigourney Street.
John F. Dowling.....	1315 Main Street.
Philip D. Bunce.....	98 High Street.
Wilton E. Dickerman.....	125 Trumbull Street.
John B. Boucher.....	25 Charter Oak Avenue.
Levi B. Cochran.....	50 Farmington Avenue.
James H. Naylor.....	1 Main Street.
Charles P. Botsford.....	219 Collins Street.
James H. Standish.....	479 Albany Avenue.
Michael H. Gill.....	36 Pearl Street.
John B. McCook.....	390 Main Street.
John W. Felty.....	902 Main Street.
Thomas W. Chester.....	110 High Street.
Joseph A. Kilbourn.....	271 Park Street.
Thomas B. Enders.....	3 Highland Street.
Charles A. Goodrich.....	5 Haynes Street.
Alfred M. Rowley.....	53 Main Street.
Emil G. Reinert.....	109 Ann Street.
Frederick L. McKee.....	68 Pratt Street.
Edward R. Lampson.....	125 Trumbull Street.
E. Terry Smith.....	70 Cone Street.
William H. FitzGerald.....	904 Main Street.
Emma J. Thompson.....	287 Trumbull Street.
Patrick J. Ryan.....	316 Park Street.
Walter R. Steiner.....	4 Trinity Street.
Ellen P. O'Flaherty.....	140 Main Street.
C. Brewster Brainard.....	98 High Street.
Eckley R. Storrs.....	179 Allyn Street.
Ernest A. Wells.....	2 Garden Street.
William H. Van Strander.....	61 Church Street.
James H. Conklin.....	89 Pratt Street.
Orin R. Witter.....	44 High Street.

Henry E. Adams.....	194	High Street.
William T. Owens.....	703	Main Street.
John C. Pierson.....	50	Windsor Avenue.
Henry F. Stoll.....	75	Pratt Street.
Paul P. Swett.....	803	Main Street.
Mark S. Bradley.....	36	Pearl Street.
Harry C. Clifton.....	98	High Street.
Robert S. Starr.....	75	Pratt Street.
Arthur C. Heublein.....	42	High Street.
Whitefield N. Thompson.....	30	Washington Street.
Maude W. Taylor.....	107	Edwards Street.
James J. Boucher.....	429	Capitol Avenue.
Isaac W. Kingsbury.....	36	Pearl Street.
Edward J. Turbert.....	18	New Park Avenue.
Patrick F. McPartland.....	1341	Main Street.
Thomas F. Welch.....	356	Windsor Avenue.
James C. Wilson.....	164	High Street.
Robert L. Rowley.....	49	Pearl Street.
Horace C. Swan.....	11	Lincoln Street.
Otto G. Wiedman.....	377	Albany Avenue.
Thomas N. Hepburn.....	42	High Street.
Henry A. Martelle.....	112	High Street.
Charles T. Beach.....	686	Main Street.
Edward H. Blair.....		Dillon Court Hotel.
James W. Ward.....	437	Capitol Avenue.
George F. Vail.....	36	Pearl Street.
Clarence M. Hatheway.....	110	High Street.
Albert R. Keith.....	43	Farmington Avenue.
Joseph P. Ryan.....	44	Church Street.
Arthur H. Griswold.....	42	Church Street.
David J. Molumphy.....	517	Main Street.
Morris Tuch.....	1333	Main Street.
John B. Griggs.....	44	High Street.
Charles H. Borden.....	36	Pearl Street.
James F. Rooney.....	308	Park Street.
Henry Bickford.....	111	Ann Street.
Paul Waterman.....	44	High Street.
Howard B. Haylett.....	158	High Street.
Domenico DeBonis.....	94	Windsor Avenue.
Calvin Weidner.....	49	Pearl Street.
Jeremiah E. McSweeney.....	6	Wethersfield Avenue.
John C. Rowley.....	50	Farmington Avenue.
William E. McClellan.....	125	Trumbull Street.
Henry C. Russ.....	114	Woodland Street.

Dwight W. Tracey.....	5 Wethersfield Avenue.
Albert E. Cobb.....	1 Spring Street.
Abraham Fischer.....	149 Windsor Avenue.
Walter G. Murphy.....	275 Farmington Avenue.
Richard J. Dwyer.....	186 Franklin Avenue.
Howard W. Brayton.....	44 High Street.
Henry G. Jarvis.....	98 High Street.
Philip T. Kennedy.....	64 Ann Street.
Robert M. Yergason.....	902 Main Street.
Leon I. Madden.....	36 Pearl Street.
Amos T. Harrington.....	17 Russ Street.
Julius L. Birdsong.....	110 High Street.
Michael J. Morrissey.....	18 Asylum Street.
Frank J. Ronayne.....	66 Church Street.
Neil H. Bailey.....	248 Laurel Street.
Robert J. Boyle.....	332 Franklin Street.
James H. Biram.....	98 High Street.
Eliot S. Cogswell.....	122 High Street.
Henry N. Costello.....	61 Belden Street.
William H. Crowley.....	15 Charter Oak Avenue.
Claude V. Flaherty.....	305 Park Street.
Charles E. Jones, Jr.....	98 High Street.
Arthur B. Landry.....	76½ Church Street.
William F. Reardon.....	803 Main Street.
Charles W. Daly.....	381 Capitol Avenue.
Edward A. Deming	Asylum and Spring Streets.
F. Arthur Emmett.....	1295 Main Street.
Daniel Cantarow.....	73 Windsor Avenue.
Clinton D. Deming.....	29 Wethersfield Avenue.
William F. Meagher.....	75 Francis Avenue.
Joseph E. Strobel.....	State Sanatorium.
John H. T. Sweet.....	71 Church Street.
Robert L. Waite.....	68 Pratt Street.
Earl B. Carter.....	631 Albany Avenue.
Calvin H. Elliott.....	137 High Street.
Harry L. F. Locke.....	1 Spring Street.
William Dwyer.....	18 Asylum Street.
Thomas H. Gallivan.....	904 Main Street.
Joseph F. O'Brien.....	18 Asylum Street.
Harry S. Reynolds.....	683 Asylum Street.
Donald B. Wells.....	2 Garden Street.
John F. Sagarino.....	298 Church Street.
A. William Branon.....	112 High Street.
James F. Lynch.....	64 Church Street.

James R. Miller.....257 Laurel Street.
 Sidney H. McPherson.....Hartford Hospital.
 Spottswood H. Parker.....700 Main Street.
 Fannie Radom.....244 Windsor Avenue.
 Thatcher W. Worthen.....36 Pearl Street.
 Arthur B. Wright.....700 Main Street.
 James E. Hutchinson.....36 Pearl Street.
 Carl F. Vernlund.....211 Church Street.

Avon:

Vernon H. C. Morse.

Berlin—EAST BERLIN:

Thomas C. Hodgson.

KENSINGTON:

Roger M. Griswold.

Matthew H. Griswold.

Bristol:

Arthur S. Brackett.

Benedict N. Whipple.

William W. Horton.

Charles R. Upson.

Canton—COLLINSVILLE:

George F. Lewis.

Ralph B. Cox.

George W. Eddy.

Carl J. Kilbourn.

East Hartford:

Thomas S. O'Connell.

Franklin H. Mayberry.

Edward H. Truex.

Harry J. Onderdonk.

East Windsor—BROAD BROOK:

Howard O. Allen.

Harold S. Backus.

Enfield—THOMPSONVILLE:

George T. Finch.

Michael J. Dowd.

John L. Bridge.

Thomas G. Alcorn.

Frank F. Simonton.

Thornton E. Vail.

Edwin S. Vail.

Farmington:

Stuart E. Phelps.

UNIONVILLE:

William T. Morrissey.

Granby:

Vincent J. Irwin, Jr.

Manchester:

Harry R. Sharpe.

SOUTH MANCHESTER:

D. C. Y. Moore.

Thomas H. Weldon.

William S. Gillam.

Noah A. Burr.

Thomas G. Sloan.

George W. May.

William R. Tinker.

Richard W. Rice.

LeVerne Holmes.

C. Charles Burlingame.

New Britain:

George Clary.

Robert M. Clark.

Hermann Strosser.

Ernst T. Fromen.
Theodore G. Wright,
1090 St. Nicholas Ave.,
New York City.

Maurice W. Maloney.

John Purney.

George H. Bodley.

Samuel W. Irving.

Arvid Anderson.

Clifton N. Cooley.

Charles A. Gillin.

Henry T. Bray.

George W. Dunn.

Michael A. Kinsella.

Harry E. Elcock.

Gertrude J. Kinsella.

Plainville:

John N. Bull.

Rocky Hill:

Oran A. Moser.

Julius E. Griswold.

Simsbury:

John P. Carver.

TARIFFVILLE:

Charles M. Wooster.

South Glastonbury:

Harry B. Rising.

Southington:

Willard G. Steadman.

William R. Miller.

Leroy A. Havey.

Suffield:

Joseph A. Gibbs.

Harold M. Brown.

WEST SUFFIELD:

William E. Caldwell.

William Levy.

West Hartford:

Charles O. Purinton.

Ralph W. E. Alcott.

Henry A. Deane.

McLeod C. Wilson.

Thomas H. Denne.

Wethersfield:

Edward G. Fox.

Arthur W. Howard.

Windsor Locks:

Joseph A. Coogan.

William J. Coyle.

Myron P. Robinson.

Anna E. Coyle.

Total Number, 242.

NEW HAVEN COUNTY.

FREDERICK G. GRAVES, M.D., Waterbury, *President*.

GEORGE BLUMER, M.D., New Haven, *Vice President*.

HERBERT THOMS, M.D., New Haven, *Secretary*.

Councilor—WILLIAM H. CARMALT, M.D., New Haven.

Censors—CHARLES W. GAYLORD, M.D., GEORGE BLUMER, M.D.,

WALTER L. BARBER, M.D.

Annual Meeting, Third Thursday in April; Semi-Annual, Third Thursday in October.

New Haven:

Frederick Belloso.....	125 Sherman Avenue.
WILLIAM H. CARMALT.....	261 St. Ronan Street.
F. H. Whittmore.....	69 Elm Street.
C. P. Lindsley.....	59 College Street.
Henry Fleischner.....	928 Grand Avenue.
MAX MAILHOUSE.....	105 Elm Street.
C. E. Park.....	42 Elm Street.
Gustavus Eliot.....	209 Church Street.
J. E. Stetson.....	Union League Club.
J. F. Luby.....	1210 Chapel Street.
W. W. Hawkes.....	31 High Street.
F. H. Wheeler.....	27 Perkins Street.
F. W. Wright.....	48 Pearl Street.
O. T. Osborne.....	252 York Street.
L. C. Peckham.....	141 Greene Street.
L. S. DeForest.....	335 Orange Street.
Henry L. Swain.....	232 York Street.
Mary B. Moody.....	Berkeley, Cal.
G. F. Converse.....	1 Whalley Avenue.
C. J. Foote.....	26 Elm Street.
STEPHEN J. MAHER.....	212 Orange Street.
Louis B. Bishop.....	356 Orange Street.
H. W. Ring.....	185 Church Street.
W. C. Welch.....	59 College Street.
A. O. Baribault.....	209 Chapel Street.
Rollin McNeil.....	New York State.
E. M. McCabe.....	287 Orange Street.
James M. Reilly.....	337 Cedar Street.
C. E. Skinner.....	50 E. 41st Street, New York City.
B. Austin Cheney	59 College Street.
Charles A. Tuttle.....	196 York Street.

H. B. Ferris.....	395 St. Ronan Street.
Leonard W. Bacon.....	113 Whitney Avenue.
P. S. Robinson.....	164 Grand Avenue.
Arthur N. Alling.....	257 Church Street.
R. A. McDonnell.....	1142 Chapel Street.
E. P. Pitman.....	52 Sylvan Avenue.
Isaac N. Porter.....	198 Dixwell Avenue.
E. H. Arnold.....	46 York Square.
Robert E. Peck.....	Elm City Private Hospital.
William C. Wurtenberg.....	28 Elm Street.
F. N. Sperry.....	59 College Street.
W. F. Verdi.....	13 Elm Street.
C. J. Bartlett	183 Bishop Street.
M. D. Slattery.....	566 Howard Avenue.
W. H. Sanford.....	650 Orange Street.
Leonard C. Sanford.....	347 Temple Street.
Willis H. Crowe.....	106 Whalley Avenue.
C. H. Robbins.....	326 Grand Avenue.
L. M. Gompertz.....	1195 Chapel Street.
Alfred G. Nadler.....	377 Orange Street.
Frederick C. Bishop.....	1241 Chapel Street.
James H. J. Flynn.....	840 Howard Avenue.
Frank A. Kirby.....	355 Whalley Avenue.
John F. Sullivan.....	205 Blatchley Avenue.
Edward F. McIntosh.....	220 Park Street.
Nicola Mariani.....	119 Greene Street.
James S. Maher.....	215 Orange Street.
A. W. Marsh.....	1012 Whalley Avenue.
W. N. Winne.....	1020 Whalley Avenue.
William S. Barnes.....	193 York Street.
Clarence L. Kilbourn.....	202 Blatchley Avenue.
Henry H. Smith.....	43 Elm Street.
Julia E. Teele.....	206 Hamilton Street.
Harry L. Welch.....	94 College Street.
Thomas V. Hynes.....	1441 Chapel Street.
H. M. Steele.....	226 Church Street.
Willis E. Hartshorn.....	1138 Chapel Street.
Richard F. Rand.....	246 Church Street.
Edward S. Moulton.....	237 York Street.
Timothy F. Cohane.....	530 Howard Avenue.
W. J. Butler.....	712 Howard Avenue.
Louis A. Notkins.....	700 Howard Avenue.
Francis H. Reilly.....	286 Columbus Avenue.
Nelson A. Ludington.....	1252 Chapel Street.

D. M. Lewis.....	36 High Street.
Seymour L. Spier.....	348 Crown Street.
William H. Bean.....	40 Pleasant Street.
E. Reed Whittemore.....	69 Elm Street.
Alice P. Ford.....	1400 Chapel Street.
Frank B. Standish.....	199 York Street.
Carl W. Henze.....	466 Orange Street.
Eugene M. Blake.....	55 Trumbull Street.
George Blumer.....	64 Trumbull Street.
Samuel M. Hammond.....	185 Church Street.
Archibald C. Herbert.....	256 McKinley Avenue.
Mary P. Dole.....	15 Elm Street.
Treby W. Lyon.....	193 York Street.
Harold S. Arnold.....	122 College Street.
Allen R. Diefendorf.....	129 Church Street.
William J. Barrett.....	63 Olive Street.
Herman P. Hessler.....	323 George Street.
Millard F. Allen.....	65 Dixwell Avenue.
Frederick G. Beck.....	199 York Street.
Raynham Townshend.....	233 Church Street.
Jeremiah J. Cohane.....	59 College Street.
Frank L. Phillips.....	413 Temple Street.
Charles Fitzgerald.....	220 Orange Street.
Charles E. Sanford.....	59 College Street.
John A. Murphy.....	28 Edwards Street.
James F. Rogers.....	447 George Street.
Wilder Tileston.....	424 Temple Street.
Marvin M. Scarbrough.....	105 College Street.
Joseph I. Linde.....	163 York Street.
Jeremiah B. Sullivan.....	274 Dixwell Avenue.
Robert G. Tracy.....	493 Howard Avenue.
Joseph M. Flint.....	320 Temple Street.
Jacques L. Buttner.....	In France.
Hugh F. Keating.....	619 Howard Avenue.
Alexander Bergman.....	49 Howe Street.
Albertus K. Boardman.....	411 Forbes Avenue.
Samuel J. Goldberg.....	314 George Street.
Israel Kleiner.....	193 York Street.
Abram A. Hershman.....	6 High Street.
George Goldman.....	1 Howe Street.
William P. Lang.....	1223 Chapel Street.
Wilda E. Butler.....	223 York Street.
William C. McGuire.....	106 Park Street.
Alexander L. Prince.....	150 York Street.
John W. Churchman.....	59 College Street.

Stuart E. Skiff.....	1194	Chapel Street.
Robert J. Ferguson.....	59	College Street.
Huggard W. Nugent.....	432	Temple Street.
George R. James.....	686	State Street.
Max R. Smirnow.....	850	Howard Avenue.
Charles W. Comfort.....	1193	Chapel Street.
Francesco D'Agostino.....	621	Chapel Street.
Harry S. Reynolds.....	136	Whalley Avenue.
Aubry L. Magill.....	68	Dixwell Avenue.
Thomas H. Russell.....	411	Temple Street.
Adelaide Lambert.....	86	Broadway.
James A. Harten.....	95	Olive Street.
Marvin Smith.....	325	Humphrey Street.
Gabriel Jackowitz.....	312	Orange Street.
Alva G. Provost.....	286	Dixwell Avenue.
Paul R. Stetson.....	154	Shelton Avenue.
Joseph B. Monahan.....	631	Howard Avenue.
Charles T. Flynn.....	150	Shelton Avenue.
Walter C. Skiff.....	1184	Chapel Street.
Charles H. Carroll.....	236	Grand Avenue.
Grover C. Sweet.....	710	Howard Avenue.
Joseph V. Esposito.....	96	Greene Street.
Harry A. Conte.....	158	St. John Street.
John E. Lane.....	59	College Street.
Robert F. Scholl.....	485	Ferry Street.
Arthur R. Weed.....	198	Park Street.
Herman R. White.....	416	Oak Place.
Maxwell Lear.....	33	Sylvan Avenue.
Fred W. Comstock.....	578	Howard Avenue.
Frederick H. Hynes.....	196	York Street.
Louis H. Levy.....	1172	Chapel Street.
William L. Sheahan, Jr.....	73	Sherman Avenue.
William T. Bull.....	12	Bull Street, Newport, R. I.
Herbert K. Thoms.....	419	Temple Street.
Milton L. Dryfus.....	824	Orange Street.
Harry E. Stewart.....	1445	Chapel Street.
J. Morris Slemmons.....	150	York Street.
Arthur Morse.....	71	College Street.
Thomas H. Young.....	185	Church Street.
Ernest Segnalla.....	516	Chapel Street.
Leonard C. Whiting.....	40	Whalley Avenue.
Isao Hirata.....	220	Orange Street.
Anthony J. Mendillo.....	26	Elm Street.
Frank J. McGuire.....	26	Elm Street.
Francis E. Gessner.....		care Surgeon General, U. S. Army.

Donald W. Porter.....	97 Grove Street.
Thomas A. O'Brien.....	42 Dwight Street.
Genesis F. Carelli.....	541 Chapel Street.
Albert L. Hendricks.....	26 Trumbull Street.
William P. Baldwin.....	1145 Chapel Street.
William P. J. Burke.....	288 Hamilton Street.
William J. Cooney.....	342 Grand Avenue.
William H. Morriss.....	New Haven Hospital.
William T. Merrill.....	Winchester Repeating Arms Co.
Joseph A. Hoegen.....	care Surgeon General, U. S. Army.
Simon B. Kleiner.....	39 Howe Street.
William F. Collins	336 St. John Street.
David A. Flynn.....	352 Grand Avenue.
Albert L. Hendricks.....	26 Trumbull Street.
Terence S. McDermott.....	1334 Chapel Street.

Ansonia:

Louis E. Cooper.
 Louis H. Wilmot.
 Edward K. Parmelee.
 Burton I. Tolles.
 William H. O'Neil.
 C. H. Mercer.
 Fred J. Peck.
 Michael S. Aaronson.

Branford:

C. W. Gaylord.
 A. J. Tenney.
 Arthur S. McQueen.

Cheshire:

Edward W. Karrman.

Derby:

Frank N. Loomis.
 Royal W. Pinney.
 Edward O'R. Maguire.
 Charles T. Baldwin.
 D. A. Richardson.
 Michael A. Parlato.
 William H. Treat.
 E. T. Sharpe.
 Thomas F. Plunkett.
 Michael J. Sheahan.
 Paul B. Kennedy.

East Haven:

Charles W. Holbrook.

Guilford:

A. W. Murless.
 R. B. West.
 Frederic DeW. Smith.

Hamden:

Walter S. Lay.

MOUNT CARMEL:

George H. Joslin.

Madison:

Milo P. Rindge.

Meriden:

N. Nickerson.
 A. W. Tracy.
 E. T. BRADSTREET
 J. D. Eggleston.
 Edward W. Smith.
 A. H. Fenn.
 E. W. Pierce.
 S. D. Otis.
 F. P. Griswold.
 E. D. Hall.
 H. A. Meeks.
 J. W. H. La Pointe.

Joseph A. Cooke.
 Louis F. Wheatley.
 Michael J. Sullivan.
 H. DeForest Lockwood.
 James B. Dinnan.
 David P. Smith.
 John T. O'Brien.
 Leslie A. Wilson.
 Thomas P. Murdock.
 Raymond V. Quinlan.

Milford:

John W. Ives.
 W. J. H. Fischer.
 Louis J. Pons.
 Carlton K. Heady.

Naugatuck:

T. M. Bull.
 William J. Delaney.
 Edwin H. Johnson.
 John J. Carroll.
 James W. Robbins.
 Walter A. Reilly.
 Walter I. Baker.
 Frank J. Tuttle.
 Chester N. Woodford.
 Michael F. Claffey.

North Haven:

R. B. Goodyear.
 G. S. Higgins.

MONTOWESE:

Ralph W. Nichols.

Orange—WEST HAVEN:

J. F. Barnett.
 Charles D. Phelps.
 Victor A. Kowalewski.
 Joseph L. Gilmore.
 Ralph DeB. Clarke.
 Platt H. Rogers.
 Charles A. Bevans.

E. W. Davis.
 Edward R. Harvey.
 Henry W. Beckwith.

Wallingford:

William S. Russell.
 William P. Wilson.
 David R. Lyman.
 John H. Buffum.
 J. David McGaughey.
 Donald G. Russell.
 C. F. Smith.

Waterbury:

F. E. Castle.
 Walter L. Barber.
 C. W. S. Frost.
 C. S. RODMAN.
 J. M. Benedict.
 Carl E. Munger.
 B. A. O'Hara.
 John F. Hayes.
 A. A. Crane.
 P. T. O'Connor.
 John D. Freney.
 C. A. Hamilton.
 George O. Robbins.
 Charles H. Brown.
 Edward W. Goodenough.
 M. L. Cooley.
 F. G. Graves.
 James L. Moriarty.
 George W. Russell.
 D. J. Maloney.
 Anthony P. Vastola.
 Robert A. Bonner.
 Raymond J. Quinn.
 John H. McGrath.
 P. F. Anderson.
 John J. Egan.
 William H. Licht.
 Thomas F. Healey.
 Isacco DeLuise.
 Michael D. Riordan.

Seymour:

F. A. Benedict.

Charles A. Monagan.
 H. G. Anderson.
 H. E. Hungerford.
 Nelson A. Pomeroy.
 P. J. Dwyer.
 L. J. Thibault.
 William A. Goodrich.
 John E. Farrell.
 Charles Engelke.
 Thomas J. McLarney.
 A. C. Swenson.
 J. J. McLinden.
 Michael J. Donahue.
 Egbert L. Smith.
 John J. Gailey.
 Isabel Cowan.
 Arthur Variell.
 Aletta L. B. Deming.
 Theodore F. Bevans.
 Arthur F. McDonald.

Jacob Gancher.
 Henry K. Hine.
 Michael J. Lawlor.
 Edmund Russell.
 John W. Fruin.
 Walter L. Barber, Jr.
 Patrick J. Brennan.
 Edward A. Herr.
 T. G. Kilmartin.
 Daniel J. Byrne.
 Edward H. Kirschbaum.
 Eugene F. Callender.
 William M. Good.
 Caroline R. Conkey.
 Philip Frank.
 Raymond H. Ryder.
 Ernest H. Johnston.
 Edmund Spicer.
 Jacques H. Green.

Total Number, 336.

NEW LONDON COUNTY.

GEORGE THOMPSON, M.D., Taftville, *President*.

WILLIAM M. HILL, M.D., Noank, *Vice President*.

LEONE F. LAPIERRE, M.D., Norwich, *Secretary*.

Councilor—PATRICK J. CASSIDY, M.D., Norwich.

Censors—EDMUND P. DOUGLASS, M.D., C. B. GRAVES, M.D.,
 C. C. GILDERSLEEVE, M.D.

Annual Meeting, First Thursday in April; Semi-Annual, First
 Thursday in October.

East Lyme—NIANTIC:

Frederick H. Dart.
 Edward Atkinson.

Griswold—JEWETT CITY:

George H. Jennings.
 Alphonse Fontaine.
 (Moosup)
 J. H. McLaughlin.

Groton:

Edmund P. Douglass.
 Charles G. Barnum.

NOANK:

William M. Hill.

Lebanon:

Edwin L. Danielson.

Lyne—OLD LYME:

Ellis K. Devitt.

Montville:

Frank E. Wilson.

Robert E. Harrington.

UNCASVILLE:

Morton E. Fox.

COLCHESTER:

Edward J. Howland.

New London:

JOHN G. STANTON.

Charles B. Graves.

Harold H. Heyer.

Carlisle F. Ferrin.

Thomas W. Rogers.

J. Clifton Taylor.

Harry M. Lee.

Emmanuel A. Henkle.

Edwin C. Chipman.

Daniel Sullivan.

Joseph M. Ganey.

James L. Harrington.

Ernest O. Winship.

William D. Cronin.

Frank M. Dunn.

Stuart J. Lawson.

James F. Young.

George P. Cheney.

Ross E. Black.

John T. Black.

Norwich:

Patrick Cassidy.

Edward P. Brewer.

Newton P. Smith.

Witter K. Tingley.

William T. Browne.

James J. Donahue.

Harry E. Higgins.

Charles H. Perkins.

Patrick J. Cassidy.

Edward J. Brophy.

Leone F. LaPierre.

William B. Casey.

Charles C. Gildersleeve.

Arnand J. LaPierre.

Louis F. Cassidy.

Robert R. Agnew.

Hugh B. Campbell.

John D. Donahue.

John J. Donahue.

John W. Callahan.

Albert C. Freeman.

W. T. Driscoll.

John S. Blackmar.

Edward J. Lynch.

TAFTVILLE:

George Thompson.

Louis I. Pratt.

YANTIC:

Herbert H. Howe.

Stonington:

Charles M. Williams.

(66 W. 55th St., N. Y.)

Thurman P. Maine.

(No. Stonington)

MYSTIC:

Louis M. Allyn.

William H. Gray.

Alexander M. Purdy.

Martin L. Smail.

OLD MYSTIC:

Albert T. Chapman.

Waterford:

George M. Minor.

Total Number, 68.

FAIRFIELD COUNTY.

FRANK M. TUKEY, M.D., Bridgeport, *President*.

F. I. NETTLETON, M.D., Shelton, *Vice President*.

ELI B. IVES, M.D., Bridgeport, *Secretary*.

Councilor—FRANK W. STEVENS, M.D.

Censors—GEORGE H. NOXON, M.D., FRANK W. STEVENS, M.D.,
FRANK H. BARNES, M.D.

Annual Meeting, Second Tuesday in April, at Bridgeport;

Semi-Annual, Second Tuesday in October.

Bridgeport:

GEORGE L. PORTER.....	372 State Street.
F. M. Wilson.....	834-836 Myrtle Avenue.
J. W. Wright.....	808-810-812 Myrtle Avenue.
Charles C. Godfrey.....	340 State Street.
S. M. GARLICK.....	474 State Street.
Henry Blodget.....	819 Myrtle Avenue.
J. C. Lynch.....	826 Myrtle Avenue.
G. W. Osborn.....	888 Broad Street.
J. R. Topping.....	349 Noble Avenue.
B. W. White.....	477 State Street.
Jacob May.....	1816 North Avenue.
George B. Cowell.....	409 Noble Avenue.
George E. Ober.....	632 Kossuth Street.
D. C. DeWolfe.....	516 Fairfield Avenue.
Henry S. Miles.....	417 State Street.
Fessenden L. Day.....	819 Myrtle Avenue.
Edward Fitzgerald.....	526 East Washington Avenue.
George S. Ford.....	527 State Street.
Frank M. Tukey.....	429 State Street.
James D. Gold.....	839 Myrtle Avenue.
Reuben A. Lockhart.....	760 Washington Avenue.
Frederick J. Adams.....	325 Fairfield Avenue.
W. J. O'Hara.....	361 Barnum Avenue.
David M. Trecartin.....	860 Park Avenue.
Harry W. Fleck.....	897 Lafayette Street.
Thomas L. Ellis.....	332 West Avenue.
Charles R. Townsend.....	446 State Street.
Herbert E. Smyth.....	376 John Street.
J. Murray Johnson.....	385 State Street.
Elmer F. Blank.....	387 Noble Avenue.
Irving L. Nettleton.....	775 Washington Avenue.

Edwards M. Smith.....	340	State Street.
Frank L. Smith.....	2178	Main Street.
David B. Wason.....	329	West Avenue.
Dorland Smith.....	834	Myrtle Avenue.
Frank W. Stevens.....	829	Myrtle Avenue.
George H. Warner.....	849	Myrtle Avenue.
Henry E. Waterhouse.....	426	State Street.
Robert J. Lynch.....	52	Courtland Street.
Charles J. Leverty.....	469	State Street.
Philip W. Bill.....	411	State Street.
F. Winthrop Pyle.....	528	State Street.
Eli B. Ives.....	561	State Street.
Frank H. Coops.....	411	State Street.
William C. Watson.....	446	Stratford Avenue.
Herman S. Schulz.....	390	State Street.
Nathan T. Pratt.....	1221	Stratford Avenue.
Charles N. Haskell.....	525	State Street.
Morris J. Greenstein.....	107	Benham Avenue.
Philip J. Curran.....	469	State Street.
Giovanni Formichelli.....	48	Walter Street.
Robert B. Keane.....	90	N. Washington Avenue.
William C. Bowers.....	336	State Street.
Charles W. Gardner.....	449	State Street.
Charles H. Sprague.....	168	West Liberty Street.
Daniel C. Patterson.....	819	Myrtle Avenue.
George W. Hawley.....	871	Park Avenue.
Florence A. Sherman.....	528	State Street.
William A. LaField.....	233	Fairfield Avenue.
Abraham Bernstein.....	346	State Street.
Nicola M. Sansome.....	519	Pembroke Street.
Benj. B. Finklestone.....	346	State Street.
Bronislaw L. Smykowski.....	405	Barnum Avenue.
William L. Weadon.....	810	Myrtle Avenue.
Henry B. Lambert.....	411	State Street.
Fraray Hale.....	477	State Street.
William H. Curley.....	697	Warren Street.
Michael J. Rowe.....	1479	Main Street.
George J. Schuele.....	485	Noble Avenue.
John F. Shea.....	1246	East Main Street.
Andrew McQueeny.....	700	Noble Avenue.
Thomas J. Roche.....	432	State Street.
Edward F. McGovern.....	390	State Street.
H. LeBaron Peters.....	233	Fairfield Avenue.
Hermann Duesing.....	1169	East Main Street.

Arthur Scrimgeour.....	701 Warren Street.
Benjamin I. Hart.....	323 State Street.
Harold M. Clarke.	350 Park Avenue.
John F. Flynn.....	Franklin Street and Wash. Avenue.
Daniel J. McCarthy.....	778 Washington Avenue.
John J. MacDonald.....	905 North Avenue.
Joseph H. Beaudry.....	835 State Street.
John H. Finnegan.....	1116 Stratford Avenue.
Paul D. Hippolitus.....	683 East Main Street.
Robert D. Roller, Jr.....	810 Myrtle Avenue.
Daniel T. Banks.....	254 East Main Street.
Joseph Cohen.....	1130 Stratford Avenue.
Edward W. Dupee.....	733 State Street.
Carl J. Gade.....	527 State Street.
Daniel Patrick Griffen.....	1350 East Main Street.
Thomas F. Healy.....	25 Yale Street.
George B. Garlick.....	474 State Street.
James L. Gilday.....	952 State Street.
Martin I. Horn.....	1963 Main Street.
John F. Quinn.....	225 Colorado Avenue.
Upton S. Reich.....	2162 North Main Street.
Thomas F. Scanlon.....	430 Barnum Avenue.
Maurice Steinberger.....	617 Hancock Avenue
Edwin B. Weldon.....	327 Broad Street
John T. H. Powers.....	1069 Barnum Avenue.
George A. Davis.....	313 State Street.

Bethel:

A. E. Barber.
George D. Wight.

Brookfield—BROOKFIELD CENTER:

Charles A. Ryder.

Danbury:

E. A. Stratton.
W. S. Watson.
D. CHESTER BROWN.
H. F. Brownlee.
George E. Lemmer.
Charles F. Craig.
William F. Gordon.
William T. Bronson.

Richard M. English.

Paul U. Sunderland.

E. J. S. Scofield.

Joseph W. Walsh.

Howard D. Moore.

Samuel F. Mullins.

George E. Thielcke.

Arthur C. Smith.

Darien:

George H. Noxon.

Noroton:

Albert L. House.

Harold E. Hoyt.

Fairfield:

W. H. Donaldson.

GREENFIELD HILL :

M. V. B. Dunham.

SOUTHPORT :

Charles E. Hyde.

Greenwich:

Frank Terry Brooks.

Fritz C. Hyde.

William L. Griswold.

Alvin W. Klein.

John A. Clarke.

William Burke.

Harriet B. Hyde.

Edward O. Parker.

Don J. Knowlton.

Aaron B. Gates.

COS COB:

Thomas J. Bergin.

RIVERSIDE :

Charles Smith.

SOUND BEACH :

Sarah E. Finch.

Albert E. Austin.

Huntington—SHELTON :

GOULD A. SHELTON.

Wm. S. Randall.

Harry L. Stilphen.

Francis I. Nettleton.

John E. Black.

William M. Stockwell.

Edward J. Finn.

Monroe—STEPNEY DEPOT :

Francis J. Wales.

STEPNEY :

George A. Smith.

New Canaan:

Myre J. Brooks.

Edmund J. O'Shaughnessy.

Charles B. Keeler.

Albert A. Wheelock.

Norwalk:

James G. Gregory.

James A. Meek.

S. H. Huntington.

William J. Tracey.

Arthur R. Turner.

Jesse M. Coburn.

Walter Hitchcock.

Ward S. Gregory.

Henry K. W. Kellogg.

George E. Cram.

SOUTH NORWALK :

C. G. Bohannan.

L. M. Allen.

Henry C. Sherer.

Francis E. Burnell.

Redding:

Ernest H. Smith.

Ridgefield:

Russell W. Lowe.

William H. Allee.

Benn A. Bryon.

Henry W. Allen.

William C. Deming.

(Georgetown)

Sandy Hook:

Walter H. Kiernan.

Stamford:

A. M. Hurlbut.

Samuel Pierson.

Alfred C. Henderson.

James I. Costanzo.

A. N. Phillips.

F. Schavoir.

R. G. Philip.

George Sherrill.

W. E. Rice.

George R. Hertzberg.

J. J. Cloonan.
 Dean Foster.
 Donald R. MacLean.
 Frank H. Barnes.
 John H. Staub.
 Richard L. Bohannon.
 John F. Harrison.
 Ralph W. Crane.
 W. T. Godfrey.
 Charles L. Dichter.
 Samuel M. Shirk.
 P. P. Van Vleet.
 Julius Nemoitin.
 Charles H. B. Meade.
 J. Wait Avery.
 I. F. Carroll.
 Raymond R. Gandy.
 William E. Smith.

Stratford:

W. B. Cogswell.
 G. F. Lewis.
 D. Howland.
 Rollin A. Curtis.

Weston—LYONS PLAIN:

F. Gorham.

Westport:

F. Powers.
 F. D. Ruland.
 J. M. Nolan.
 F. H. McLaury.
 E. S. Brodsky.

GREEN'S FARMS:

David W. McFarland.

Total Number, 213.

WINDHAM COUNTY.

LOUIS I. MASON, M.D., Willimantic, *President*.

ERNEST R. PIKE, M.D., East Woodstock, *Vice President*.

A. D. MARSH, M.D., Hampton, *Secretary*.

Councilor—R. C. WHITE, M.D., Willimantic.

Censors—R. ROBINSON, M.D., CHARLES E. HILL, M.D., T. R. PARKER, M.D.

Annual Meeting, Third Thursday in April; Semi-Annual
 Meeting, Third Thursday in October.

Brooklyn:

A. H. Tanner.

Hampton:

Arthur D. Marsh.

Killingly:

George Barnes.

DANIELSON:

RIENZI ROBINSON.
 W. H. Judson.
 George M. Burroughs.

Nathaniel Hibbard.
 J. N. Perrault.

EAST KILLINGLY:

Charles E. Hill.

Plainfield:

Arthur A. Chase.

CENTRAL VILLAGE:

James L. Gardner.

Moosup:

Charles N. Allen.
 W. W. Adams.
 Francis Downing.

Pomfret:

S. B. OVERLOCK.

Putnam:

John B. Kent.

F. A. Morrell.

Omer LaRue.

Warren W. Foster.

Marguerite J. Bullard.

Edward F. Perry.

Emilieu Roch.

Thompson:

Robert C. Paine.

Willimantic:

T. R. Parker.

R. C. White.

Laura H. Hills.

Joseph A. Girouard.

Clarence E. Simonds.

Owen O'Neil.

Charles H. Girard.

J. H. Egbert.

Louis I. Mason.

W. P. Stuart Keating.

Charles A. Jenkins.

Fred M. Smith.

Windham:

F. E. Guild.

Woodstock—EAST WOODSTOCK:

Ernest R. Pike.

Total Number, 37.

LITCHFIELD COUNTY.DAVID D. REIDY, M.D., Winsted, *President*.CHARLES R. TURKINGTON, M.D., Litchfield, *Vice President*.HARRY B. HANCHETT, M.D., Torrington, *Secretary*.*Councilor*—ELIAS PRATT, M.D., Torrington.*Censors*—W. S. HULBURT, M.D., R. S. GOODWIN, M.D.,
F. S. SKIFF, M.D.Annual Meeting, Fourth Tuesday in April; Semi-Annual, First
Tuesday in October.**Canaan—FALLS VILLAGE:**

Francis S. Skiff.

Thomas J. Shannon.

C. W. Camp.

F. H. Lee.

John L. Adams.

Kent:

A. L. Tuttle.

Litchfield:

John L. Buel.

Charles N. Warner.

Charles H. Turkington.

R. A. Marcy.

Marvin Z. Westervelt.

(578 Winthrop Ave.,
New Haven.)

M. L. Deming.

Cornwall—WEST CORNWALL:

Joseph Robinson.

J. H. North.

Carrie North Stevens.

C. I. Page.
J. T. Sedgwick.

New Hartford:
Chester F. English.
Florizel Janvier.

New Milford:
George E. Staub.
George H. Wright.
B. E. Bostwick.

New Preston:
H. G. Stevens.

Norfolk:
John C. Kendall.
I. L. Hamant.
Lucius D. Bulkley.
Frederick S. Dennis.
A. W. Pinney.

North Canaan—CANAAN:
John G. Adam.
Charles W. Camp.
Henry S. Turrill.

Plymouth—TERRYVILLE:
W. W. Wellington.
Richard J. Lawton.
Harold B. Woodward.
R. J. Lawton.

Salisbury—LAKEVILLE:
William Bissell.
William B. Bissell.
Charles T. LaMoure.

Sharon:
Clarence W. Bassett.
Jerome S. Chaffee.

Thomaston:
Robert Hazen.
Ralph S. Goodwin.
James H. Kane.

Torrington:
William L. Platt.
Elias Pratt.
Jerome S. Bissell.
Charles H. Carlin.
Sanford H. Wadhams.
H. D. Moore.
William J. Hogan.
Timothy M. Ryan.
Harry B. Hanchett.
Thomas L. Thomson.
William C. Kennedy.
Lawrence D. Neary.
Floyd A. Weed.
James J. Tynan.
A. J. Barker.
H. T. Partree.
H. C. Oelschlagel.
H. B. Chapin.
W. E. Hoffmann.

Washington:
Frederic W. Wersebe.

Watertown:
Ernest K. Loveland.
James S. Martin.

Winchester—WINSTED:
Edward L. Pratt.
William S. Hulbert.
Salmon J. Howd.
David D. Reidy.
Ernest R. Kelsey.
Maurice J. Reidy.
Joseph D. Hartnett.
W. S. Richards.

WEST WINSTED:
William S. Richards.

Woodbury:
William G. Reynolds.
Howard S. Allen.

Total Number, 76.

MIDDLESEX COUNTY.

CHARLES E. BUSH, M.D., Cromwell, *President*.

JOHN H. MOUNTAIN, M.D., Middletown, *Vice President*.

JAMES H. KINGMAN, M.D., Middletown, *Secretary*.

Councilor—GEORGE N. LAWSON, M.D., Middle Haddam.

Censors—CHARLES E. STANLEY, M.D., CUSHMAN A. SEARS, M.D.,
FREDERICK B. BRADEEN, M.D.

Annual Meeting, Second Thursday in April; Semi-Annual, Second
Thursday in October.

Chatham—MIDDLE HADDAM:

George N. Lawson.

EAST HAMPTON:

Albert Field.

Frederick T. Fitch.

Chester:

Fred S. Smith.

Clinton:

David A. Fox.

Cromwell:

FRANK K. HALLOCK.

Charles E. Bush.

Charles A. McKendree.
(N. Y. City.)

Durham:

Charles E. Zink.

East Haddam:

M. W. Plumstead.

Essex:

Frederick B. Bradeen.

Charles C. Davis.

Higganum:

Leonard J. Lowe.

Middletown:

William E. Fisher.

Charles E. Stanley.

John E. Bailey.

Arthur J. Campbell.

Arthur B. Coleburn.

J. Francis Calef.

John E. Loveland.

Kate C. Mead.

Daniel A. Nolan.

John H. Mountain.

Jessie W. Fisher.

James T. Mitchell.

James H. Kingman.

Thomas P. Walsh.

James Murphy.

James M. Keniston.

(Portland, Me.)

Louis R. Brown.

Hamilton Rinde.

Sidney A. Lord.

(Newton, Mass.)

Edgar Fauver.

C. Floyd Haviland.

Sheldon S. S. Campbell.

Francis J. O'Brien.

Gerardo G. Petrocelli.

Lewis A. Maitland.

Charles B. Young.

Old Saybrook:

Calista V. Luther.
Irwin Grannis.

Portland:

Cushman A. Sears.
Frank E. Potter.

Charles B. Chedel.
John L. Burnham.

Saybrook—DEEP RIVER:

Howard T. French.
Arthur M. Pratt.

Total Number, 47.

TOLLAND COUNTY.

DONALD L. ROSS, M.D., Mansfield Depot, *President*.

JOHN F. HACKETT, M.D., Mansfield Depot, *Vice President*.

ELI P. FLINT, M.D., Rockville, *Secretary and Treasurer*.

Councilor—THOMAS F. ROCKWELL, M.D., Rockville.

Censors—T. F. O'LOUGHLIN, M.D., JOHN P. HANLEY, M.D.,
FREDERICK W. WALSH, M.D.

Annual Meeting, Third Tuesday in April; Semi-Annual, Third
Tuesday in October.

Coventry:

Isaac P. Fiske.

SOUTH COVENTRY:

WILLIAM L. HIGGINS.

Hebron:

Cyrus H. Pendleton.

Mansfield—MANSFIELD DEPOT:

Donald L. Ross.
John F. Hackett.

Somers:

Alonzo L. Hurd:

Stafford—STAFFORD SPRINGS:

CYRUS B. NEWTON.

Frank L. Smith.

James Stretch.

John P. Hanley.

James W. Dawson.

Tolland:

Willard N. Simmons.

Vernon—ROCKVILLE:

Thomas F. Rockwell.

Eli P. Flint.

Thomas F. O'Loughlin.

Frederick W. Walsh.

Wright B. Bean.

F. M. Dickinson.

Total Number, 18.

OFFICERS OF THE CONNECTICUT STATE MEDICAL
SOCIETY FROM ITS ORGANIZATION IN 1792
TO THE PRESENT TIME.*

PRESIDENTS.

1792	Leverett Hubbard.	1876	Ashbel W. Barrows.
1794	Eneas Munson.	1877	Robert Hubbard.
1801	James Potter.	1878	Charles M. Carleton.
1803	Thomas Mosley.	1879	Alfred R. Goodrich.
1804	Jeremiah West.	1880	Gideon L. Platt.
1807	John R. Watrous.	1881	William Deming.
1812	Mason F. Cogswell.	1882	William G. Brownson.
1822	Thomas Hubbard.	1883	Elisha B. Nye.
1827	Eli Todd.	1884	Benjamin N. Comings.
1829	John S. Peters.	1885	Elijah C. Kinney.
1832	William Buel.	1886	Thomas H. Hills.
1834	Thomas Miner.	1887	Francis Bacon.
1837	Silas Fuller.	1888	George L. Porter.
1841	Elijah Middlebrook.	1889	Orlando Brown.
1843	Luther Ticknor.	1890	Melancthon Storrs.
1846	Archibald Welch.	1891	Charles A. Lindsley.
1849	George Sumner.	1892	Cyrus B. Newton.
1851	Rufus Blakeman.	1893	Francis D. Edgerton.
1853	Richard Warner.	1894	Francis N. Braman.
1854	William H. Cogswell.	1895	Seth Hill.
1856	Benjamin H. Catlin.	1896	Rienzi Robinson.
1858	Ashbel Woodward.	1897	Ralph S. Goodwin.
1861	Josiah G. Beckwith.	1898	Henry P. Stearns.
1863	Ebenezer K. Hunt.	1899	Charles S. Rodman.
1865	Nathan B. Ives.	1900	Leonard B. Almy.
1866	Isaac G. Porter.	1901	John H. Grannis.
1867	Charles Woodward.	1902	Gould A. Shelton.
1868	Samuel B. Beresford.	1903	Samuel B. St. John.
1869	Henry Bronson.	1904	William H. Carmalt.
1870	Charles F. Sumner.	1905	†Edward H. Welch.
1871	Gurdon W. Russell.		Nathaniel E. Wordin.
1872	Henry W. Buel.	1906	William L. Higgins.
1873	Ira Hutchinson.	1907	Everett J. McKnight.
1874	Lowell Holbrook.	1908	Seldom B. Overlock.
1875	Pliny A. Jewett.	1909	Samuel D. Gilbert.

* Prepared for the Secretary by Dr. J. B. Lewis, Hartford.

† Resigned.

1910	Frank K. Hallock.	
1911	John G. Stanton.	
1912	E. T. Bradstreet.	
1913	D. Chester Brown.	
1914		{ ‡Oliver C. Smith.
		{ Stephen J. Maher.
1915		Max Mailhouse.
1916		Samuel M. Garlick.
1917		Edward K. Root.

VICE PRESIDENTS.

1792	Eneas Munson.	1872	Ira Hutchinson.
1794	Elihu Tudor.	1873	Lowell Holbrook.
1796	James Potter.	1874	Pliny A. Jewett.
1801	Thomas Mosley.	1875	Ashbel W. Barrows.
1803	Jeremiah West.	1876	Robert Hubbard.
1804	Jared Potter.	1877	Charles M. Carleton.
1806	John R. Watrous.	1878	Alfred R. Goodrich.
1807	Mason F. Cogswell.	1879	Gideon L. Platt.
1812	John Barker.	1880	William Deming.
1813	Timothy Hall.	1881	William G. Brownson.
1814	Thomas Hubbard.	1882	Elisha B. Nye.
1822	Eli Todd.	1883	Benjamin N. Comings.
1824	Eli Ives.	1884	Elijah C. Kinney.
1827	John S. Peters.	1885	Samuel Hutchins.
1829	William Buel.	1886	Francis Bacon.
1832	Thomas Miner.	1887	George L. Porter.
1834	Silas Fuller.	1888	Orlando Brown.
1837	Elijah Middlebrook.	1889	Charles J. Fox.
1841	Luther Ticknor.	1890	Charles A. Lindsley.
1843	Archibald Welch.	1891	Cyrus B. Newton.
1846	Dyer T. Brainard.	1892	Francis D. Edgerton.
1847	George Sumner.	1893	Francis N. Braman.
1849	Rufus Blakeman.	1894	Seth Hill.
1851	Richard Warner.	1895	Rienzi Robinson.
1853	William H. Cogswell.	1896	Ralph S. Goodwin.
1854	Benjamin H. Catlin.	1897	Henry P. Stearns.
1856	Ashbel Woodward.	1898	Charles S. Rodman.
1858	Josiah G. Beckwith.	1899	Leonard B. Almy.
1861	Ebenezer K. Hunt.	1900	John H. Grannis.
1863	Nathan B. Ives.	1901	Gould A. Shelton.
1865	Isaac G. Porter.	1902	Samuel B. St. John.
1866	Charles Woodward.	1903	William H. Carmalt.
1867	Samuel B. Beresford.	1904	Edward H. Welch.
1868	Henry Bronson.		{ Frederick A. Morrell.
1869	Charles F. Sumner.	1905	{ Eli P. Flint.
1870	Gurdon W. Russell.		{ Charles E. Brayton.
1871	Henry W. Buel.	1906	{ Franklin P. Clark.

1907	{ Miner C. Hazen.	1913	{ William S. Hulbert.
	{ Irving L. Hamant.		{ Kate C. Mead.
1908	{ Samuel D. Gilbert.	1914	{ Stephen J. Maher.
	{ Walter L. Barber.		{ John B. Kent.
1909	{ Theodore R. Parker.	1915	{ Charles B. Graves.
	{ William J. Tracey.		{ Cushman A. Sears.
1910	{ Edmund P. Douglass.	1916	{ George M. Burroughs.
	{ Edward T. Bradstreet.		{ John C. Kendall.
1911	{ D. Chester Brown.	1917	{ Patrick Cassidy.
	{ Ralph C. Paine.		{ Charles C. Godfrey.
1912	{ Frederick Gilnack.		
	{ Alvin E. Barber.		

SECRETARIES.

1792	Jared Potter.	1843	Ralph Farnsworth.
1794	James Clark.	1844	Worthington Hooker.
1796	Daniel Sheldon.	1846	Gurdon W. Russell.
1798	Nathaniel Perry.	1849	Josiah G. Beckwith.
1800	Samuel Woodward.	1858	Panet M. Hastings.
1801	William Shelton.	1862	Leonard J. Sanford.
1805	John Barker.	1864	Moses C. White.
1810	Eli Ives.	1876	Charles W. Chamberlain.
1813	Joseph Foot.	1883	Samuel B. St. John.
1817	Jonathan Knight.	1889	Nathaniel E. Wordin.
1827	Samuel B. Woodward.	1905	Walter R. Steiner.
1830	George Sumner.	1912	Wilder Tileston.
1832	Charles Hooker.	1913	Marvin McR. Scarbrough.
1838	Archibald Welch.	1917	John E. Lane.

TREASURERS.

1792	John Osborn.	1834	Elijah Middlebrook.
1793	Jeremiah West.	1837	Luther Tichnor.
1794	John Osborn.	1841	Virgil Maro Dow.
1796	Mason F. Cogswell.	1851	George O. Sumner.
1800	William B. Hall.	1863	James C. Jackson.
1808	Timothy Hall.	1876	Francis D. Edgerton.
1813	Richard Ely.	1883	Erastus P. Swasey.
1816	Thomas Miner.	1889	William W. Knight.
1817	John S. Peters.	1905	Joseph H. Townsend.
1827	William Buel.	1916	Phineas H. Ingalls.
1829	Joseph Palmer.		

ALPHABETICAL LIST

OF THE

MEMBERS OF THE CONNECTICUT STATE MEDICAL SOCIETY,

With Date and Place of Graduation, and Post-Office Address.

Aaronson, Michael S.	N. Y. Univ., '13.....	Ansonia.
Abrams, Alva Elnathan.....	Albany, '81.....	Hartford.
Adam, John Geikie.....	Trinity, Tor., '00.....	North Canaan.
Adams, Frederick Joseph.....	Univ. N. Y., '95.....	Bridgeport.
Adams, Henry Eli.....	Yale, '02	Hartford.
Adams, John L.	Trinity, Tor., '00.....	Canaan.
Adams, William Waldo.....	Bellevue, '91.....	Moosup.
Agnew, Robert Robertson.....	Yale, '08.....	Norwich.
Alcorn, Thomas Grant.....	P. & S., Boston, '97....	Thompsonville.
Alcott, Ralph Waldo Emerson.....	U. S. Med. Coll., '81..	West Hartford.
Allee, William Hanford.....	P. & S., N. Y., '99.....	Ridgefield.
Allen, Charles Noah.....	Univ. Vt., '81.....	Moosup.
Allen, Henry W.	Med. Chir., Phila., '09....	Ridgefield.
Allen, Howard Oliver.....	Univ. N. Y., '79.....	Broad Brook.
Allen, Howard S.	Yale, '04.....	Woodbury.
Allen, Lauren Melville.....	P. & S., N. Y., '80....	South Norwalk.
Allen, Millard Fillmore.....	Med. Chi., Phila., '95....	New Haven.
Alling, Arthur Nathaniel, B.A., Yale, '86....	P. & S., N. Y., '91.....	New Haven.
Allyn, Louis Maxson.....	Univ. Pa., '03.....	Mystic.
Alton, Charles De Lancey.....	Bellevue, '75.....	Hartford.
Anderson, Arvid.....	Univ. Mich., '93.....	New Britain.
Anderson, Henry Gray.....	P. & S., N. Y., '89.....	Waterbury.
Anderson, Peyton F.	N. Y. Homeo. Med. Col., '13..	Waterbury.
Arnold, Ernest Hermann.....	Yale, '94.....	New Haven.
Arnold, Harold Sears, B.A., Yale, '00.....	Yale, '03.....	New Haven.
Atkinson, Edward.....	Univ. Vt., '93.....	Niantic.
Austin, Albert Elmer, A.B. & M.A., Amherst. Jeff., '05.....		Sound Beach.
Avery, John Waite.....	Univ. Vt., '97.....	Stamford.
Axtelle, John Franklin.....	L. I. Hosp. Coll., '71.....	Hartford.
Backus, Harold Simeon.....	L. I. Hosp. Coll., '03....	Broad Brook.
Bacon, Leonard Woolsey, B.A., Yale, '88.....	Yale, '92.....	New Haven.
Bailey, John Elmore.....	P. & S., N. Y., '85.....	Middletown.
Bailey, Michael Angelo.....	P. & S., Balt., '93.....	Hartford.
Bailey, Neil H.	P. & S., Balt., '11.....	Hartford.

- Baker, Walter I.Hahnemann, Phila., '98....Naugatuck.
 Baldwin, Charles Tomlinson.....Bell Med. Col., '83.....Derby.
 Baldwin, William Pitt.....Yale, '90, N. Y. Homeo., '91, New Haven.
 Banks, Daniel Tony.....Fordham, '12.....Bridgeport.
 Barber, Alvin Elizur.....Berkshire, '54.....Bethel.
 Barber, Walter Lewis.....Bellevue, '73.....Waterbury.
 Barber, Walter Lewis, Jr., A.B., Yale, '03....N. Y. Univ. & Bellevue, '07, Waterbury.
 Baribault, Arthur Octave.....Vict. Med. Coll., '89.....New Haven.
 Barker, A. J.....Bellevue, '97.....Torrington.
 Barnes, Frank Hazelhurst.....N. Y. Homeo. Med., '96....Stamford.
 Barnes, George.....Univ. N. Y., '04.....Killingly.
 Barnes, Wm. Samuel, Ph.B., Yale, '95.....Yale, '97.....New Haven.
 Barnett, John Frederick.....Yale, '69.....West Haven.
 Barnum, Charles Gardiner, B.A. Middle-
 bury Coll.; M.A., Middlebury Coll.....Yale, '11.....Groton.
 Barrett, William Joseph.....Md. Med., '04.....New Haven.
 Barrows, Benj. Safford, Ph.B., '83.....Univ. N. Y., '87.....Hartford.
 Bartlett, Charles Joseph, B.A., Yale, '92;
 M.A., Yale, '94.....Yale, '95.....New Haven.
 Bassett, Clarence Wheeler.....Univ. N. Y., '82.....Sharon.
 Beach, Charles Coffing, Ph.B., Yale, '77.....P. & S., N. Y., '82.....Hartford.
 Beach, Charles Thomas.....Yale, '05.....Hartford.
 Bean, William Hill, Ph.B., Yale, '82.....Yale, '03.....New Haven.
 Bean, Wright Butler.....P. & S., N. Y., '95.....Rockville.
 Beaudry, Joseph Horace.....McGill, '13.....Bridgeport.
 Beck, Frederick George.....Yale, '03.....New Haven.
 Beckwith, Henry W.Dartmouth Med. Coll., '07..Seymour.
 Bell, George Newton.....Yale, '92.....Hartford.
 Bellosa, Frederick.....Yale, '72.....New Haven.
 Benedict, Frank Allen.....P. & S., N. Y., '87.....Seymour.
 Benedict, John Mitchell.....Univ. N. Y., '82.....Waterbury.
 Bergin, Thomas Joseph, B.A., Yale, '96.....Yale, '99.....Cos Cob.
 Bergman, Alexander, B.S., Stockholm.....City of N. Y., '95.....New Haven.
 Bernstein, Abraham.....Yale, '08.....Bridgeport.
 Bevans, Charles A.....Med. Chir., Phila., '87...West Haven.
 Bevans, Theodore F.Univ. Minn., '03.....Waterbury.
 Bickford, Henry.....Penn. Eclectic Med., '68....Hartford.
 Bill, Philip Worcester, Ph.B., Yale, '97.....P. & S., N. Y., '01.....Bridgeport.
 Biram, James Harrington.....Cornell, '10.....Hartford.
 Birdsong, Julian Lee, B.S., Nashville, '99....Johns Hopkins, '09.....Hartford.
 Bishop, Frederic Courtney, B.A., Yale, '92....Yale, '95.....New Haven.
 Bishop, Louis Bennett, B.A., Yale, '86.....Yale, '88.....New Haven.
 Bissell, Jerome Samuel.....Yale, '94.....Torrington.
 Bissell, William, B.A., Yale '53.....Yale, '56.....Lakeville.
 Bissell, William Bascom, A.B., Yale, '88.....P. & S., N. Y., '92.....Lakeville.
 Black, John Eugene, Ph.B., Yale, '03.....Yale, '08.....Shelton.
 Black, John T.Hahn. Med. Coll., '94...New London.
 Black, Ross Elliot.....P. & S., N. Y., '05.....New London.
 Blackmar, John Stanley.....P. & S., N. Y., '98.....Norwich.
 Blair, Edward Holden.....P. & S., Balt., '06.....Hartford.
 Blake, Eugene Maurice.....Yale, '06.....New Haven.
 Blank, Elmer Francis.....Starling, '97.....Bridgeport.
 Blodget, Henry, A.B., Yale, '75.....Bellevue, '81.....Bridgeport.
 Blumer, George, M.A., Yale, '07.....Cooper Med. Coll., '90....New Haven.

Boardman, Albertus Kellogg.....	Univ. Penn., '99.....	New Haven.
Bodley, George Houghton.....	Yale, '07.....	New Britain.
Bohannon, Charles Gordon.....	Univ. N. Y., '78.....	South Norwalk.
Bohannon, Richard Lee.....	Univ. N. Y., '74.....	Stamford.
Bonner, Robert Alexander.....	Univ. of Md., '12.....	Waterbury.
Borden, Charles Herbert.....	P. & S., N. Y., '96.....	Hartford.
Bostwick, Benjamin Earle.....	L. I. Hosp. Coll., '90.....	New Milford.
Botsford, Charles Porter.....	Yale, '94.....	Hartford.
Boucher, James Joseph.....	P. & S., Balt., '04.....	Hartford.
Boucher, John Bernard.....	P. & S., Balt., '94.....	Hartford.
Bowers, William Cutler.....	P. & S., N. Y., '77.....	Bridgeport.
Boyle, Robert J.	Yale, '08.....	Hartford.
Brackett, Arthur Stone, B.A., Yale '92.....	Jefferson, '95.....	Bristol.
Bradeen, Frederick Barton.....	Univ. Pa., '99.....	Essex.
Bradley, Mark Spaulding.....	P. & S., N. Y., '92.....	Hartford.
Bradstreet, Edward Thomas, B.A., Yale, '74.....	P. & S., N. Y., '77.....	Meriden.
Brainard, Clifford Brewster, Ph.B., Yale, '94.....	Yale, '98.....	Hartford.
Branon, A. William.....	Jeff., '13.....	Hartford.
Bray, Henry T.	Univ. Vt., '02.....	New Britain.
Brayton, Howard Wheaton, Ph.B., Brown, '06.....	Harvard, '11.....	Hartford.
Brennan, Patrick Joseph.....	Yale, '07.....	Waterbury.
Brewer, Edward Pliny.....	Dartmouth, '79.....	Norwich.
Bridge, John Law, B.S., Wesleyan, '88; Ph.D., Clark, '94.....	Harvard, '03.....	Thompsonville.
Brodsky, Emanuel S.	Univ. Zurich, Switzerland, '08.....	Westport.
Bronson, William Thaddeus.....	Univ. N. Y. '98.....	Danbury.
Brooks, Frank Terry, B.A., Yale, '90.....	L. I. Hosp. Coll., '93.....	Greenwich.
Brooks, Myre Joel.....	Yale, '67.....	New Canaan.
Brophy, Edward Joseph.....	Yale, '04.....	Norwich.
Brown, Charles Henry.....	Univ. N. Y., '93.....	Waterbury.
Brown, David Chester.....	Yale, '84.....	Danbury.
Brown, Harold Morris.....	Jeff., '13.....	Suffield.
Brown, Louis Raymond, A.B., Tufts.....	Tufts, '07.....	Middletown.
Browne, William Tyler, Ph.B., Yale, '78.....	Harvard, '82.....	Norwich.
Brownlee, Harris Fenton.....	P. & S., N. Y., '88.....	Danbury.
Bryon, Benn Adelmer.....	Bellevue, '90.....	Ridgefield.
Buel, John Eaidlaw.....	P. & S., N. Y., '88.....	Litchfield.
Buffum, John Harold, Ph.B., Univ. Vt., '96.....	Univ. Vt., '98.....	Wallingford.
Bulkley, Lucius Duncan, A.B., Yale, '66; M.A.....	P. & S., N. Y., '69.....	Norfolk.
Bull, John Norris.....	P. & S., N. Y., '78.....	Plainville.
Bull, Thomas Marcus.....	P. & S., N. Y., '87.....	Naugatuck.
Bull, William Tillinghast, Ph.B., Yale, '88.....	P. & S., N. Y., '02.....	New Haven.
Bullard, Marguerite Jane, A.B., Cornell, '02.....	Cornell Univ., '04.....	Putnam.
Bunce, Philip Dibble, A.B., Yale, '88.....	P. & S., N. Y., '91.....	Hartford.
Burke, William P. J.	Yale, '90.....	New Haven.
Burke, William.....	L. I. Hosp. Coll., '96.....	Greenwich.
Burlingame, C. Charles.....	Hahn, Chic., '08.....	South Manchester.
Burnham, John Ladd, A.B., Yale, '96.....	Yale, '97.....	Portland.
Burnell, Francis Edwin.....	L. I. Hosp. Coll., '94.....	South Norwalk.
Burr, Noah Arthur.....	Yale, '01.....	South Manchester.
Burroughs, George McClellan.....	Balt. Med. Coll., '00.....	Danielson.
Bush, Charles Ellsworth.....	Yale, '94.....	Cromwell.
Butler, Wilda Edwin.....	Hahnemann, Phila., '97.....	New Haven.
Butler, William James.....	L. I. Hosp. Coll., '95.....	New Haven.
Buttner, Jacques Louis.....	Yale, '09.....	New Haven.

- Byrne, Daniel J.Yale, '09.....Waterbury.
- Caldwell, William Ely.....Balt. Med. Coll., '95....West Suffield.
- Calef, Jeremiah Francis, B.A., Wesleyan, '77..Yale, '80.....Middletown.
- Callahan, John W.P. & S., Balt., '11.....Norwich.
- Callender, Eugene F.Yale, '12.....Waterbury.
- Camp, Charles Welford.....Univ. N. Y., '74.....Canaan.
- Campbell, Arthur Joseph.....P. & S., Balt., '85.....Middletown.
- Campbell, Hugh B.Univ. of Penn., '09.....Norwich.
- Campbell, Sheldon Samuel Stratton.....Univ. Vt., '02.....Middletown.
- Cantarow, Daniel.....Tufts, '11.....Hartford.
- Case, Genesis Frank.....Yale, '11.....New Haven.
- Carlin, Charles Henry.....Univ. Mich., '96.....Torrington.
- Carmalt, William Henry, M.A., Yale, '81....P. & S., N. Y., '61.....New Haven.
- Carroll, Charles H.Yale, '12.....New Haven.
- Carroll, Isaiah F.Balt. Med., '06.....Stamford.
- Carroll, John James.....Dartmouth, '97.....Naugatuck.
- Carter, Earl B., Ph.B., Yale, '07.....Johns Hopkins, '11.....Hartford.
- Carver, John Preston.....Albany, '96.....Simsbury.
- Casey, William Bradford.....Univ. Med., '06.....Norwich.
- Cassidy, Louis Thomas, Georgetown, '04....Georgetown, '08.....Norwich.
- Cassidy, Patrick.....Univ. Vt., '65.....Norwich.
- Cassidy, Patrick John, B.A., Yale, '94.....Johns Hopkins, '98.....Norwich.
- Castle, Frank Edwin.....Yale, '70.....Waterbury.
- Chaffee, Jerome Stuart, Ph.B., Yale, '94....Univ. Pa., '97.....Sharon.
- Chapman, Albert Taylor.....P. & S., N. Y., '64.....Old Mystic.
- Chapin, Harry BaileyGeorgetown, '08.....Torrington.
- Chase, Arthur Alverdo.....Harvard, '01.....Plainfield.
- Chedel, Charles Brigham, A.B., Dartmouth, '03 Dartmouth, '06.....Portland.
- Cheney, Benjamin Austin, B.A., Yale, '88....Yale, '90.....New Haven.
- Cheney, George Philip.....Md. Med. School, '13...New London.
- Chester, Thomas Weston, B.A., Rutgers, '92;
M.A., '95.....P. & S., N. Y., '95.....Hartford.
- Chipman, Edwin Clifford, A.B., Alfred Univ. '87. P. & S., N. Y., '91.....New London.
- Churchman, John Woolman, B.A., '98;
M.A., Princeton, '01.....Johns Hopkins, '02.....New Haven.
- Claffey, Michael Francis.....Univ. of Vt., '14.....Naugatuck.
- Clark, Robert Moses.....Univ. Pa., '91.....New Britain.
- Clarke, Harold Metcalf.....Univ. Toronto, '09.....Bridgeport.
- Clarke, John Alexander.....Bellevue, '97.....Greenwich.
- Clarke, Ralph DeBallard, A.B., Univ. N. Y., '04 Johns Hopkins, '08.....West Haven.
- Clary, George, A.B., Dartmouth, '52.....Yale, '57.....New Britain.
- Clifton, Harry Colman.....Univ. Pa., '01.....Hartford.
- Cloonan, John Joseph.....P. & S., Balt., '97.....Stamford.
- Cobb, Albert Edward.....Yale, '98.....Hartford.
- Coburn, Jesse Milton.....Boston Univ., '74.....Norwalk.
- Cochran, Levi Bennett.....Univ. Pa., '93.....Hartford.
- Cogswell, Eliot S.Harvard, '12.....Hartford.
- Cogswell, William Badger.....Bellevue, '81.....Stratford.
- Cohane, Jeremiah Joseph.....Yale, '98.....New Haven.
- Cohane, Timothy Francis.....Yale, '97.....New Haven.
- Cohen, Joseph, A.B., Coll. City of N. Y., '94N. Y. Med. Coll., '09.....Bridgeport.
- Coleburn, Arthur Burr.....P. & S., N. Y., '90.....Middletown.
- Collins, William F.Yale, '04.....New Haven.
- Comfort, Chas. W., B.A., Yale, '11.....Yale, '07.....New Haven.

- Comstock, Fred W. Tufts Med., '13.....New Haven.
 Conklin, James Henry.....Univ. Vt., '99.....Hartford.
 Conte, Harry A. L. I. H. C., '12.....New Haven.
 Converse, George Frederick.....Yale, '87.....New Haven.
 Coogan, Joseph Albert.....Bellevue, '76.....Windsor Locks.
 Cooney, William Joseph.....Yale, '12.....New Haven.
 Cook, Ansel Granville.....P. & S., N. Y., '87.....Hartford.
 Cooke, Joseph Anthony.....Yale, '97.....Meriden.
 Cooley, Clifton Mather.....Yale, '08.....New Britain.
 Cooley, Myron Lynus.....Buffalo Univ., '86.....Waterbury.
 Cooper, Louis Edward, Ph.B., '84.....Yale, '86.....Ansonia.
 Coops, Frank Harvey, B.A., Dalhousie, '88...P. & S., Balt., '96.....Bridgeport.
 Costanzo, James J. Univ. of Ill.Stamford.
 Costello, Henry N., B.A., Yale, '06.....Johns Hopkins, '10.....Hartford.
 Cowan, Isabel.....Wom. Med. Coll., N. Y., '92, Waterbury.
 Cowell, George B. P. & S., N. Y., '88.....Bridgeport.
 Cox, Ralph Benjamin.....McGill, '02.....Collinsville.
 Coyle, Anna E. Women's Med., '12...Windsor Locks.
 Coyle, William Joseph.....Buffalo Univ., '85.....Windsor Locks.
 Craig, Charles Franklin.....Yale, '94.....Danbury.
 Cram, George Eversleigh, Ph.B., Yale, '97...P. & S., N. Y., '01.....Norwalk.
 Crane, Augustin Averill, B.A., Yale, '85.....Yale, '87.....Waterbury.
 Crane, Ralph William.....Yale, '05.....Stamford.
 Crary, David.....Yale, '69.....Hartford.
 Cronin, William Daniel.....P. & S., N. Y., '00.....New London.
 Crossfield, Frederick Solon.....Bellevue, '78.....Hartford.
 Crowe, Willis Hanford.....P. & S., N. Y., '95.....New Haven.
 Crowley, William H. Buffalo, '08.....Hartford.
 Curley, William Henry.....Cornell, '08.....Bridgeport.
 Curran, Philip John.....P. & S., N. Y., '01.....Bridgeport.
 Curtis, Rollin Alanson.....Univ. N. Y., '93.....Stratford.
- D'Agostino, Francesco.....Naples Univ. Italy, '05..New Haven.
 Daly, Charles W. P. & S., Balt., '10.....Hartford.
 Danielson, Edwin L. P. & S., N. Y., '82.....Lebanon.
 Dart, Frederick Howard.....P. & S., N. Y., '84.....Niantic.
 Davis, Charles Clarence.....Yale, '07.....Essex.
 Davis, Elias Wyman, B.A., Yale, '80.....Yale, '92.....Seymour.
 Davis, George A.....Jefferson, '03Bridgeport.
 Dawson, James William Toledo, '94.....Stafford Springs.
 Day, Fessenden Lorenzo, B.A., Bates, '90...Bellevue, '93.....Bridgeport.
 Deane, Henry Augustus.....Dartmouth, '68.....South Windsor.
 DeBonis, Domenico.....Naples, '90.....Hartford.
 DeForest, Louis Shepard, B.A., Yale, '79;
 M.A., Yale, '91.....Univ. Jena, '85.....New Haven.
 Delaney, William Joseph.....McGill Univ., '87.....Naugatuck.
 DeLuise, Isacco.....Naples Univ., '03.....Waterbury.
 Deming, Alletta Langdon Bedford, A.B., Cornell,Cornell, '05.....Waterbury.
 Deming, Clinton D., B.A., Yale, '07.....Johns Hopkins, '10.....Hartford.
 Deming, Edward A., Ph.B., Yale, '04.....Johns Hopkins, '08.....Hartford.
 Deming, N. L.....P. & S., N. Y., '93.....Litchfield.
 Deming, William C.....P. & S., N. Y., '84.....Georgetown.
 Denne, Thomas Harman.....Vermont, '05.....West Hartford
 Dennis, Frederick Shepard, B.A., Yale, '72;
 M.R.C.S. Bellevue, '74.....Norfolk.

- Devitt, Ellis King.....Univ. Med. Coll., '07.....Lyme.
 DeWolfe, Daniel Charles.....Univ. Vt., '86.....Bridgeport.
 Dichter, Charles Levi.....Md. Med. Coll., '05.....Stamford.
 Dickerman, Wilton Elias, B.A., Amherst, '90..Yale, '93.....Hartford.
 Dickinson, Francis McLean, Ph.B., Yale, '00..P. & S., N. Y., '05.....Rockville.
 Diefendorf, Allen Ross, B.A., Yale '94.....Yale, '96.....New Haven.
 Dinnan, James B.Yale, '04.....Meriden.
 Dole, Mary Phylinda, B.S., Mt. Holyoke, '89..Wom. Med. Coll., '88....New Haven.
 Donahue, James Joseph.....P. & S., Balt., '96.....Norwich.
 Donahue, John DanielBalt. Med. '09.....Norwich.
 Donahue, John James.....Balt. Med., '09.....Norwich.
 Donahue, Michael Joseph.....Univ. Pa., '86.....Waterbury.
 Donaldson, William Henry.....Univ. N. Y., '81.....Fairfield.
 Douglass, Edmund Peaslee.....Univ. N. Y., '89.....Groton.
 Dowd, Michael Joseph.....Balt. Med. Coll., '01....Thompsonville.
 Dowling, John Francis.....L. I. Hosp. Coll., '90.....Hartford.
 Down, Edwin Augustus.....P. & S., N. Y., '87.....Hartford.
 Downing, Francis.....Balt. Med. Coll., '08.....Moosup.
 Driscoll, William T.P. & S., Balt., '12.....Norwich.
 Dryfus, Milton L.Yale, '12.....New Haven.
 Duesing, Hermann.....Univ. of Wurtzburg, '92..Bridgeport.
 Dunham, Martin Van Buren.....Harvard, '67.....Greenfield Hill.
 Dunn, Frank Martin.....Balt. Med. Coll., '08.....New London.
 Dunn, George Washington.....Balt. Med. Coll., '09....New Britain.
 Dupee, Edward Wilson.....Univ. of Md., '00.....Bridgeport.
 Dwyer, Patrick James, A.B., Fordham, '94....Univ. N. Y., '97.....Waterbury.
 Dwyer, Richard Joseph.....Jeff., '08.....Hartford.
 Dwyer, William.....Johns Hopkins, '13.....Hartford.
 Eddy, George William.....Vermont, '04.....Collinsville.
 Egan, John Joseph.....Univ. of Md., '12.....Waterbury.
 Egbert, Jay Hobart, A.B., A.M., Univ. Chicago..P. & S., N. Y., '97.....Willimantic.
 Eggleston, Jeremiah Dewey.....P. & S., N. Y., '79.....Meriden.
 Elcock, Harry A.Yale, '11.....New Britain.
 Eliot, Gustavus, B.A., Yale, '77; A.M., '82....P. & S., N. Y., '80.....New Haven.
 Elliott, Calvin H.Med. Chi., '05, M.Sc. Buckland, '04, Hartford.
 Ellis, Thomas Long, B.A., Yale, '94.....Yale, '96.....Bridgeport.
 Elmer, Edward Oliver.....P. & S., Balt., '94.....Hartford.
 Emmett, F. Arthur.....Yale, '02.....Hartford.
 Enders, Thomas Burnham, A.B., Yale, '88....P. & S., N. Y., '91.....Hartford.
 Engelke, Charles.....P. & S., N. Y., '02.....Waterbury.
 English, Charles Verrin.....St. Louis, '12.....Hartford.
 English, Richard Matthew.....Yale, '98.....Danbury.
 Esposito, Joseph V.Jeff., '12.....New Haven.
 Farrell, John Edward.....Univ. N. Y., '03.....Waterbury.
 Fauver, Edgar.....P. & S., Columbia, '09....Middletown.
 Felty, John Wellington, A.M., Emporia,
 Kan., '97.....Jeff., '84.....Hartford.
 Fenn, Ava Hamlin.....P. & S., Balt., '86.....Meriden.
 Ferguson, Robert J.Hahn., Phila., '89.....New Haven.
 Ferrin, Carlisle Franklin, B.A., Univ. Vt., '91..P. & S., N. Y., '95.....New London.
 Ferris, Harry Burr, B.A., Yale, '87.....Yale, '90.....New Haven.
 Field, Albert.....L. I. Hosp. Coll., '67..East Hampton.
 Finch, George Terwilliger, B.A., Hobart, '75,
 M.A., Hobart, '78.....Bellevue, '77.....Thompsonville.

Finch, Sarah Elizabeth.....	Cornell, '04.....	Sound Beach.
Finn, Edward J.....	Yale, '10.....	Shelton.
Finnegan, John Hamill.....	Maryland Med. Coll., '12.....	Bridgeport.
Finklestone, Benjamin Brooks.....	P. & S., Balt., '10.....	Bridgeport.
Fischer, Abraham.....	N. Y. Univ. & Bell. Hosp., '09.....	Hartford.
Fischer, William John Henry.....	Yale, '11.....	Milford.
Fisher, Jessie Weston.....	Wom. Med. Coll., Pa., '93.....	Middletown.
Fisher, William Edwin.....	Univ. Pa., '76.....	Middletown.
Fiske, Isaac Parsons.....	Univ. N. Y., '75.....	Coventry.
Fitch, Frederick Tracy.....	Yale, '04.....	East Hampton.
Fitzgerald, Charles.....	Univ. Vt., '98.....	New Haven.
Fitzgerald, Edward.....	P. & S., Balt., '84.....	Bridgeport.
Fitzgerald, William Henry.....	Univ. Vt., '95.....	Hartford.
Flaherty, Claude V.	Yale, '10.....	Hartford.
Fleck, Harry Willard.....	Jeff., '96.....	Bridgeport.
Fleischner, Henry.....	Yale, '78.....	New Haven.
Flint, Eli Percival.....	Yale, '79.....	Rockville.
Flint, Joseph Marshall, B.S., Univ. of Chicago, '95; Princeton, '00; M.A., Yale, '07.....	Johns Hopkins, '00.....	New Haven.
Flynn, Charles T.	Yale, '11.....	New Haven.
Flynn, David A.	Yale, '05.....	New Haven.
Flynn, James Henry Joseph.....	Yale, '95.....	New Haven.
Flynn, John Francis.....	P. & S., Balt., '12.....	Bridgeport.
Fontaine, Alphonse.....	Laval Univ., '92.....	Moosup.
Foote, Charles Jenkins, B.A., Yale, '83.....	Harvard, '87.....	New Haven.
Ford, Alice Porter.....	Wom. Med. Coll., Pa., '04.....	New Haven.
Ford, George Skiff.....	Bellevue, '93.....	Bridgeport.
Formichelli, Giovanni.....	Univ. Italy, '98.....	Bridgeport.
Foster, Dean, M.A., Univ. Kan.	Yale, '99.....	Stamford.
Foster, Warren Woden.....	Harvard, '82.....	Putnam.
Fox, David Austin.....	Univ. & Belle., '02.....	Clinton.
Fox, Edward Gager.....	Univ. N. Y., '83.....	Wethersfield.
Fox, Morton Earl.....	L. I. Hosp. Coll., '03.....	Uncasville.
Frank, Philip.....	Yale, '07.....	Waterbury.
Freeman, Albert C.	Univ. of Vt., '13.....	Norwich.
French, Howard Truman.....	P. & S., N. Y., '91.....	Deep River.
Freney, John Daniel.....	L. I. Hosp. Coll., '93.....	Waterbury.
Fromen, Ernst Theodore.....	Milwaukee Med. Coll., '97.....	New Britain.
Frost, Charles Warren Selah.....	P. & S., N. Y., '80.....	Waterbury.
Fruin, John William.....	L. I. Hosp. Coll., '08.....	Waterbury.
Gade, Carl Johannes.....	Yale, '10.....	Bridgeport.
Gailey, John Joseph.....	Bowdoin, '98.....	Waterbury.
Gallivan, Thomas H.	Yale, '09.....	Hartford.
Gancher, Jacob.....	L. I. Coll. Hosp., '06.....	Waterbury.
Gandy, Raymond R.	Univ. Penn., '99.....	Stamford.
Ganey, Joseph Matthew.....	P. & S., N. Y., '04.....	New London.
Gardner, Charles Wesley.....	Univ. Md., '01.....	Bridgeport.
Gardner, James Lester.....	Univ. Vt., '81.....	Central Village.
Garlick, George B.	Yale, '12.....	Bridgeport.
Garlick, Samuel Middleton, B.A., Dart. '74.....	Harvard, '77.....	Bridgeport.
Gates, Aaron B.	L. I. Coll. Hosp., '12.....	Greenwich.
Gaylord, Charles Woodward, B.A., Yale, '70.....	Yale, '72.....	Branford.
Gessner, Francis E.	Yale, '12.....	New Haven.
Gibbs, Joseph Addison.....	P. & S., Chicago, '02.....	Suffield.

- Gilday, James Lowrey.....Med. Coll. of Cin., '13....Bridgeport.
 Gildersleeve, Charles Childs.....Yale, '96.....Norwich.
 Gill, Michael Henry.....Yale, '96.....Hartford.
 Gillam, William S.Univ. Pa., '88.....South Manchester.
 Gilmore, Joseph L.Yale, '04.....West Haven.
 Girard, Charles Hermenigilde.....Victoria, '96.....Willimantic.
 Girouard, Joseph ArthurBalt. Med. Coll., '99....Willimantic.
 Gladwin, Ellen Hammond.....Wom. Med. Coll., N. Y., '72, Hartford.
 Godfrey, Charles Cartlidge, Ph.B., Yale, '77..Dartmouth, '83.....Hartford.
 Godfrey, William Truitt.....Cornell, '07.....Stamford.
 Gold, James Douglass, Ph.B., Yale, '88.....P. & S., N. Y., '91.....Bridgeport.
 Goldberg, Samuel James.....Yale, '07.....New Haven.
 Goldman, George.....Yale, '10.....New Haven.
 Gompertz, Louis Michael.....Yale, '96.....New Haven.
 Good, William M.Yale, '09.....Waterbury.
 Goodenough, Edward Winchester, B.A.,
 Yale, '87.....Yale, '93.....Waterbury.
 Goodrich, Charles Augustus, B.S., Mass. Agr.
 Coll., '93.....P. & S., N. Y., '96.....Hartford.
 Goodrich, William Albert.....Med. Cbl., Phila., '02.....Waterbury.
 Goodwin, Ralph Schuyler, Ph.B., Yale, '90...P. & S., N. Y., '93.....Tbomaston.
 Goodyear, Rohert Beardsley.....Yale, '68.....North Haven.
 Gordon, William Francis.....L. I. Hosp. Coll., '96.....Danbury.
 Gorham, Frank.....Yale, '76.....Lyons Plains.
 Grannis, Irwin.....Yale, '96.....Old Saybrook.
 Graves, Charles Burr, B.A., Yale, '82.....Harvard, '86.....New London.
 Graves, Frederick George.....Yale, '92.....Waterbury.
 Gray, William Henry.....P. & S., N. Y., '89.....Mystic.
 Gray, William Wetmore, B.S., Dickinson, '85..Bellevue, '90.....Bridgeport.
 Green, Jacques H.N. Y. Univ. & Bellevue Med. Coll., '13...Waterbury.
 Greenstein, Morris Jacob.....Univ. South, '06.....Bridgeport.
 Gregory, James Glynn, B.A., Yale, '65.....P. & S., N. Y., '68.....Norwalk.
 Gregory, Ward Slosson, Ph.B., Yale, '99.....P. & S., N. Y., '03.....Norwalk.
 Griffen, Daniel Patrick.....Jeff., '14.....Bridgeport.
 Griggs, John Bagg.....Yale, '97.....Hartford.
 Griswold, Arthur Heywood, A.B., Harvard, '02..Johns Hopkins, '06.....Hartford.
 Griswold, Frederick Pratt.....P. & S., N. Y., '76.....Meriden.
 Griswold, Julius Eghert.....Univ. N. Y., '79.....Rocky Hill.
 Griswold, Mattbew H.Univ. Vt., '13.....Kensington.
 Griswold, Roger M.Univ. N. Y., '75.....Kensington.
 Griswold, William Loomis, Ph.B., Yale, '81...P. & S., N. Y., '85.....Greenwich.
 Guild, Frank Eugene.....L. I. Hosp. Coll., '85.....Windham.
- Hackett, John Francis, B.A., Yale.....McGill, '06.....Mansfield Depot.
 Hale, Fraray, B.S., Amherst, '05.....P. & S., N. Y., '09.....Bridgeport.
 Hall, Edward Dormanio.....Harvard, '73.....Meriden.
 Hall, Joseph Barnard.....Yale, '92.....Hartford.
 Hallock, Frank Kirkwood, A.B., Wesleyan, '82;
 A.M., '85.....P. & S., N. Y., '85.....Cromwell.
 Hamant, Irving Louis.....L. I. Hosp. Coll., '90.....Norfolk.
 Hamilton, Charles Allen.....Univ. Vt., '86.....Waterbury.
 Hammond, Samuel Mowhray.....Yale, '96.....New Haven.
 Hanchett, Harry Bigelow.....Jeff., '05.....Torrington.
 Hanley, John Patrick.....Cornell, '06.....Stafford Springs.
 Harrington, Amos Thomas, A.B., Yale, '07...Harvard, '10.....Hartford.

Harrington, James Leon.....	Jeff., '03.....	New London.
Harrington, Robert E.	Balt. Med. Coll., '06.....	Montville.
Harrison, John Francis.....	Jeff., '03.....	Stamford.
Hart, Benjamin I., B.A., N. Y. Univ., '00.....	P. & S., N. Y., '04.....	Bridgeport.
Harten, James A.	Balt. Med., '10.....	New Haven.
Hartnett, Joseph Daniel.....	Balt. Med., '11.....	Winsted.
Hartshorn, Willis Ellis, Ph.B., Colo. Coll., '95.....	Univ. Minn., '98.....	New Haven.
Harvey, Edward R.	Balt. Med., '02.....	Seymour.
Haskell, Charles Nahum.....	Univ. Vt., '90.....	Bridgeport.
Hatheway, Clarence Morris.....	Bellevue, '03.....	Hartford.
Havey, Leroy A.	Univ. of Vt., '10.....	Southington.
Haviland, C. Floyd.....	Syracuse Univ., '96.....	Middletown.
Hawkes, William Whitney, B.A., Yale, '79.....	Yale, '81.....	New Haven.
Hawley, George Walter, Ph.B., Yale, '96.....	Cornell, '99.....	Bridgeport.
Hayes, John Francis.....	Univ. N. Y., '79.....	Waterbury.
Haylett, Howard Bulkley.....	Vermont, '07.....	Hartford.
Hazen, Robert, A.B., Univ. Vt., '96.....	Univ. Vt., '98.....	Thomaston.
Heady, Carlton K.	Jeff., '13.....	Milford.
Healey, Thomas F.	L. I. Med. Coll., '08.....	Waterbury.
Healey, Thomas Francis	Niagara, '93.....	Bridgeport.
Henderson, Elfred Collard, B.S., Amherst, '99.....	P. & S., N. Y., '03.....	Stamford.
Hendricks, Albert L.	Yale, '07.....	New Haven.
Henkle, Emmanuel Alexander.....	Cornell, '99.....	New London.
Henze, Carl William.....	Yale, '00.....	New Haven.
Hepburn, Thomas Norval, A.B., Randolph Macon Coll., Va., A.B., '00; A.M., '01.....	Johns Hopkins, '05.....	Hartford.
Herbert, Archibald Cecil.....	Univ. Va., '03.....	New Haven.
Herr, Edward A., Dartmouth, '06.....	Vermont, '09.....	Waterbury.
Hershman, Abram Aron.....	Yale, '08.....	New Haven.
Hertzberg, George Robert.....	Dartmouth, '99.....	Stamford.
Hessler, Herman Philip.....	Yale, '03.....	New Haven.
Heublein, Arthur Carl.....	P. & S., N. Y., '02.....	Hartford.
Heyer, Harold Hankinson.....	Univ. N. Y., '87.....	New London.
Hibbard, Nathaniel.....	Harvard, '82.....	Danielson.
Higgins, Gould Shelton.....	Yale, '01.....	North Haven.
Higgins, Harry Eugene.....	Univ. N. Y., '96.....	Norwich.
Higgins, William Lincoln.....	Univ. N. Y., '90.....	South Coventry.
Hill, Charles Edwin, B.A., Yale, '76.....	Harvard, '79.....	East Killingly.
Hill, William Martin.....	Univ. Va., '07.....	Noank.
Hills, Laura Heath.....	Wom. Med. Coll., '96.....	Willimantic.
Hine, Henry Kingsley.....	Md. Med. Coll., '08.....	Waterbury.
Hippolitus, Paul Difrancesca.....	Yale, '12.....	Bridgeport.
Hirata, Isao.....	Yale, '12.....	New Haven.
Hitchcock, Walter, Ph.B., Yale, '80.....	P. & S., N. Y., '83.....	Norwalk.
Hodgson, Thomas Cady, M.B., Toronto, '94.....	Trinity Medical Coll., '94, East Berlin.	
Hoegen, Joseph A.....	Homeo. Med. Coll., N. Y., '15, New Haven.	
Hoffmann, Wallace Ellsworth.....	Hahn., Chi., '05.....	Torrington.
Hogan, William John.....	Yale, '98.....	Torrington.
Holbrook, Charles Werden, M.A., Amherst, '93.....	Yale, '96.....	East Haven.
Holmes, LeVerne.....	Boston Univ. Homeo. Sc. of Med., '04, So. Manchester.	
Horn, Martin Isadore, Med. Coll. N. Y., '12, N. Y. Homeo. Med. Coll., '13, Bridgeport.		
Horton, William Wickham.....	Univ. N. Y., '79.....	Bristol.
House, Albert Lewis.....	Yale, '95.....	Noroton.
Howard, Arthur Wayland.....	Univ. N. Y., '90.....	Wethersfield.
Howard, John.....	Dartmouth, '81.....	Hartford.

Howd, Salmon Jennings.....Jeff., '83.....Winsted.
 Howe, Herbert H.Univ. Vt., '80.....Yantic.
 Howland, DeRuyter.....P. & S., N. Y., '06.....Stratford.
 Howland, Edward Joseph.....Vt. Med., '11.....Colchester.
 Hoyt, Harold Eliphalet, A.B., Univ. Kansas, Albany, '94.....Noroton.
 Hulbert, William Sharon.....Univ. N. Y., '80.....Winsted.
 Hungerford, Henry Edward.....Yale, '98.....Waterbury.
 Huntington, Samuel Henry.....Yale, '76.....Norwalk.
 Hurd, Alonzo L., B.S., Me., '82.....Univ. Vt., '91.....Somers.
 Hurlhut, Augustin Moen, B.A., Yale, '76.....P. & S., N. Y., '79.....Stamford.
 Hutchinson, James E., A.B. Ohio State Univ., '09, John Hopkins, '05.....Hartford.
 Hyde, Charles Elias.....Yale, '10.....Southport.
 Hyde, Fritz Carleton.....Univ. Mich., '00.....Greenwich.
 Hyde, Harriet Baker.....Univ. Mich., '00.....Greenwich.
 Hynes, Frederick H.Tufts Med., '13.....New Haven.
 Hynes, Thomas Vincent.....Yale, '00.....New Haven.

Ingalls, Phineas Henry, A.B., Bowdoin, '77

A.M., '85.....P. & S., N. Y., '80.....Hartford.
 Irving, Samuel Wellington.....Yale, '91.....New Britain.
 Irwin, Vincent J., Jr.Yale, '10.....Granby.
 Ives, Eli Butler.....Yale, '03.....Bridgeport.
 Ives, John Wagner.....Yale, '00.....Milford.

Jackowitz, Gabriel, Boston Univ. Med. Coll., '07.....New Haven.
 James, George R.Yale, '10.....New Haven.
 Janvier, Florizel.....Univ. Vt., '13.....New Hartford.
 Jarvis, Henry Gildersleeve, A.B., Yale, '06...Johns Hopkins, '10.....Hartford.
 Jenkins, Charles Albert.....Balt. Med. Coll., '11.....Willimantic.
 Jennings, George Herman.....L. I. Hosp. Coll., '75....Jewett City.
 Jones, Charles Emerson, Jr.Bellevue, '09.....Hartford.
 Johnson, Edwin Hines.....Univ. Vt., '88.....Naugatuck.
 Johnson, John Murray.....L. I. Hosp. Coll., '95.....Bridgeport.
 Joslin, George Harvey.....Univ. Vt., '87.....Mt. Carmel.
 Judson, William Henry.....Jeff., '78.....Danielson.

Kane, James Hugh.....Md. Med. Coll., '04.....Thomaston.
 Kane, Thomas Francis.....Bellevue, '87.....Hartford.
 Karrman, Edward William.....N. Y. Univ., '84.....Cheshire.
 Keane, Robert Barnabas.....Bellevue, '03.....Bridgeport.
 Keating, Hugh Francis.....Yale, '08.....New Haven.
 Keating, Wm. Patrick Stuart.....Jeff., '99.....Willimantic.
 Keeler, Charles B.Hahn., Chicago, '88.....New Canaan.
 Keith, Albert Russell, A.B., Colby, '97.....Harvard, '03.....Hartford.
 Kelsey, Ernest Russell.....Univ. Md., '01.....Winsted.
 Kendall, John Calvin, B.A., Yale, '70.....P. & S., N. Y., '75.....Norfolk.
 Keniston, James Mortimer.....Harvard, '71.....Portland, Me.
 Kennedy, Paul B.Bellevue, N. Y., '95.....Derby.
 Kennedy, Philip Thomas, B.A., Trinity, '05..Harvard, '09.....Hartford.
 Kennedy, William Clement.....Georgetown, '10.....Torrington.
 Kent, John Bryden.....Harvard, '60.....Putnam.
 Kiernan, Walter H., A.B., Trinity.....McGill, '98.....Sandy Hook.
 Kilbourn, Carl J.U. of V., '14.....Hartford.
 Kilhourn, Clarence Leishman.....Yale, '97.....New Haven.
 Kilbourn, Joseph Austin.....P. & S., Balt., '97.....Hartford.

- Kilmartin, Thomas J. Univ. N. Y., '95..... Waterbury.
 Kingsman, James Henry, A.B., Yale, '82..... P. & S., N. Y., '85..... Middletown.
 Kingsbury, Isaac William, A.B., Harvard, '96. P. & S., N. Y., '03..... Hartford.
 Kinsella, Gertrude J. Tufts, '12..... New Britain.
 Kinsella, Michael A. Tufts, '12..... New Britain.
 Kirby, Frank Alonzo..... Columbian Univ. Wash., D. C., '95... New Haven.
 Kirschbaum, Edw. H. Yale, '12..... Waterbury.
 Klein, Alvin Walter..... Cin. Coll. Med. & Surg., '89, Greenwich.
 Kleiner, Israel..... Yale, '08..... New Haven.
 Kleiner, Simon B..... Yale, '15..... New Haven.
 Knight, William Ward..... Univ. N. Y., '76..... Hartford.
 Knowlton, Don Jerome, A.B., Harvard..... Harvard, '12..... Greenwich.
 Kowalewski, Victor Alexander, B.A., Yale, '99. Yale, '02..... West Haven.
- La Field, Arthur Wm. N. Y. Homeo., '05..... Bridgeport.
 Lambert, Adelaide..... Boston Univ. Med. Coll., '84, New Haven.
 Lambert, Henry Bertram..... Jeff., '09..... Bridgeport.
 Lampson, Edward Rutledge, A.B., Trinity, '91. P. & S., N. Y., '96..... Hartford.
 Landry, Arthur B. Jeff., '09..... Hartford.
 Lane, John E., B.A., Yale, '94, M.A., '97.... Yale, '03..... New Haven.
 Lang, William P. Hahnemann, Phila., '01... New Haven.
 LaMoure, Charles TenEyck..... Albany, '94..... Lakeville.
 LaPierre, Arnand J. Univ. Vt., '10..... Norwich.
 LaPierre, Leone Franklin..... Yale, '01..... Norwich.
 La Pointe, John William Henry..... Laval Univ., Montreal, '92... Meriden.
 LaRue, Omar..... Vict., Montreal, '71..... Putnam.
 Lawlor, Michael Joseph, Holy Cross, '02..... P. & S., N. Y., '06..... Waterbury.
 Lawson, George Newton, B.A., Yale, '90..... Yale, '92..... Middle Haddam.
 Lawson, Stuart Johnston..... Univ. Virginia, '05..... New London.
 Lawton, Franklin Lyman, Ph.B., Yale, '90.... Yale, '93..... Hartford.
 Lawton, Richard J. Md. Med., '08..... Terryville.
 Lay, Walter Sidders..... Yale, '01..... Hamden.
 Lear, Maxwell..... Yale, '11..... New Haven.
 Lee, Frank Herbert..... Albany, '88..... Canaan.
 Lee, Harry Moore..... Columbia, '08..... New London.
 Lemmer, George Edward..... Bellevue, '85..... Danbury.
 Leverty, Charles Joseph..... N. Y. Univ. & Bell., '01... Bridgeport.
 Levy, Louis H. Yale, '11..... New Haven.
 Levy, William..... Yale, '11..... West Suffield.
 Lewis, Dwight Milton, B.A., Yale, '97..... Johns Hopkins, '01..... New Haven.
 Lewis, George Francis, B.A., '64..... Yale, '65..... Collinsville.
 Lewis, George Frederick, B.A., Trinity, '77... Yale, '84..... Stratford.
 Licht, William H. Johns Hopkins, '11..... Waterbury.
 Linde, Joseph Irving..... Yale, '08..... New Haven.
 Lindsley, Charles Purdy, Ph.B., Yale, '75.... Yale, '78..... New Haven.
 Locke, Harry L. F. Tufts, '12..... Hartford.
 Lockhart, Reuben Arthur..... Yale, '91..... Bridgeport.
 Lockwood, Howard DeForest..... Yale, '01..... Meriden.
 Loewe, Leonard J., M.D.V., Harvard, '98.... Tufts, '01..... Higganum.
 Loomis, Frank Newton, B.A., Yale '81..... Yale, '83..... Derby.
 Lord, Sidney Archer..... Harvard, '94..... Middletown.
 Loveland, Ernest Kilburn..... Yale, '97..... Watertown.
 Loveland, John Elijah, B.A., Wesleyan, '89... Harvard, '02..... Middletown.
 Lowe, Russell Walter..... Univ. N. Y., '89..... Ridgefield.
 Luby, John Francis, Ph.B., Yale, '76..... P. & S., N. Y., '78..... New Haven.

- Ludington, Nelson Amos.....Yale, '01.....New Haven.
 Luther, Calista Vinton.....Wom. Med. Coll., Pa., '85, Old Saybrook.
 Lyman, David Russell.....Univ. Va., '99.....Wallingford.
 Lyman, Emmett Judson.....Yale, '07.....Westbrook.
 Lynch, Edward James.....Univ. Pa., '09.....Norwich.
 Lynch, John Charles.....Univ. N. Y., '86.....Bridgeport.
 Lynch, James F.P. & S., Balt., '13.....Hartford.
 Lynch, Robert Joseph.....Bellevue, '97.....Bridgeport.
 Lyon, Trehy Williams.....Yale, '03.....New Haven.

 MacDonald, John Joseph.....Yale, '07.....Bridgeport.
 MacLean, Donald RobertBalt. Med. Coll., '01.....Stamford.
 Madden, Leon Irving, A.B., Clark.....Harvard, '10.....Hartford.
 Magill, Aubrey L.McGill Univ., '08.....New Haven.
 Maguire, Edward O'Reilly.....P. & S., N. Y., '98.....Derhy.
 Maher, James Stephen, Ph.B., Yale, '92.....Yale, '96.....New Haven.
 Maher, Stephen John.....Yale, '87.....New Haven.
 Mailhouse, Max, Ph.B., Yale, '76.....Yale, '78.....New Haven.
 Maine, Thurman Park.....Med. Chi., '12.....Mountville.
 Maitland, Lewis A.Middletown.
 Maloney, Daniel Joseph.....Univ. N. Y., '96.....Waterbury.
 Maloney, Maurice Washington.....Jeff. Med. Coll., Phil., '97, New Britain.
 Marcy, Robert A.N. Y. Univ. Med. Coll., '82, Litchfield.
 Mariani, Nicola.....Univ. Naples, '93.....New Haven.
 Marsh, Arthur D.Yale, '08.....Hampton.
 Marsh, Arthur Washburn.....Univ. Vt., '82.....New Haven.
 Mattle, Henry Augustus, A.B., Bowdoin, '01..Johns Hopkins, '05.....Hartford.
 Martin, James S.Yale, '05.....Watertown.
 Mason, Louis Irving.....P. & S., N. Y., '91.....Willimantic.
 May, George William.....Milwaukee Med. Coll., '95, So. Manchester.
 May, Jacob Rush.....Chicago, '76.....Bridgeport.
 Mayherry, Franklin Hayden.....Univ. Vt., '85.....East Hartford.
 McCahe, Edward Michael, B.A., Manhattan, '83..Yale, '87.....New Haven.
 McCarthy, Daniel Joseph.....P. & S., Balt., '06.....Bridgeport.
 McClellan, William Ernest.....Toronto, '04.....Hartford.
 McCook, John Butler, B.S., Trinity, '90.....P. & S., N. Y., '94.....Hartford.
 McDermott, Terrance Stephen.....Yale, '98.....New Haven.
 McDonald, Arthur Francis.....P. & S., N. Y., '05.....Waterbury.
 McDonnell, Ralph Augustine, B.A., Yale, '90..Yale, '92.....New Haven.
 McFarland, David Walter.....Univ. N. Y., '85.....Greens Farms.
 McGaughey, James David.....Jeff., '10.....Wallingford.
 McGovern, Edward Francis.....Univ. Balt., '01.....Bridgeport.
 McGrath, John H.Yale, '08.....Waterbury.
 McGuire, Frank J.Yale, '97.....New Haven.
 McGuire, William C.Yale, '09.....New Haven.
 McIntosh, Edward Francis.....Yale, '97.....New Haven.
 McKee, Frederick Lyman.....P. & S., N. Y., '99.....Hartford.
 McKendree, Charles A., A.B., Dartmouth, '07..Dartmouth, '10.....Cromwell.
 McKnight, Everett James, B.A., Yale, '76;
 M.A., '77.....P. & S., N. Y., '79.....Hartford.
 McLarney, Thomas Joseph.....P. & S., Balt., '97.....Waterbury.
 McLaughlin, John Henry.....P. & S., Balt., '09.....Jewett City.
 McLaury, Frank Harold.....P. & S., N. Y., '95.....Westport.
 McLinden, James John.....Univ. Pa., '98.....Waterbury.
 McNeil, Rollin.....Yale, '62.....New York State.

- McPartland, Patrick Farrell.....Balt. Med. Coll., '05.....Hartford.
 McPherson, Sidney Horace.....Tufts, '13.....Hartford.
 McQueen, Arthur Samuel.....Yale, '01.....Branford.
 McQueeney, Andrew.....Yale, '05.....Bridgeport.
 McSweeney, Jeremiah Everett.....Vermont, '91.....Hartford.
 Mead, Kate Campbell.....Wom. Med. Coll., Pa., '88, Middletown.
 Meade, Charles Havelock Beverly.....Univ. of Louisville, '02.....Stamford.
 Meagher, William F.Univ. Vt., '99.....Hartford.
 Meek, James A.McGill Univ., '75.....So. Norwalk.
 Meeks, Harold Albert.....Bellevue, '90.....Meriden.
 Mendillo, Anthony Joseph.....Yale, '07.....New Haven.
 Mercer, Clarence H.Md. Med. Coll., '05.....Ansonia.
 Merrill, William T.Dartmouth, '90.....New Haven.
 Miles, Henry Shillingford, Ph.G., N. Y., '88. P. & S., N. Y., '91.....Bridgeport.
 Miller, George Root.....P. & S., Balt., '86.....Hartford.
 Miller, James Raglan.....Johns Hopkins, '11.....Hartford.
 Miller, William Radley.....Albany, '98.....Southington.
 Minor, George Maynard.....L. I. Hosp. Coll., '85.....Waterford.
 Mitchell, James Thomas.....Univ. N. Y., '91.....Middletown.
 Molumphy, David James.....Jeff., '06.....Hartford.
 Monagan, Charles Andrew, B.S., Trinity, '93. Univ. Pa., '98.....Waterbury.
 Monahan, Joseph B.Dartmouth Med. Coll., '94, New Haven.
 Moody, Mary Blair.....Buffalo, '76.....New Haven.
 Moore, DeC. Y.N. Y. Homeo. Med. Sc., '95, So. Manchester.
 Moore, Howard D.Hahn., Phila., '93.....Danbury.
 Moore, Howard Doolittle.....Bellevue, '97.....Torrington.
 Morgan, William Dennison, A.B., Trinity, '72. P. & S., N. Y., '76.....Hartford.
 Moriarty, James Ligouri.....Harvard, '96.....Waterbury.
 Morrell, Frederick Augustus.....L. I. Hosp. Coll., '85.....Putnam.
 Morris, William Haviland.....Johns Hopkins, '12.....New Haven.
 Morrissey, Michael Joseph.....P. & S., Balt., Md., '97.....Hartford.
 Morrissey, William Thomas, B.A.,
 Holy Cross Coll.Baltimore, '09.....Unionville.
 Morse, Arthur.....Johns Hopkins, '06.....New Haven.
 Morse, Vernon H. Chipman.....Harvard, '03.....Avon.
 Moser, Oran Alexander.....Yale, '02.....Rocky Hill.
 Moulton, Edward Seymour, B.A., Oberlin, '91. Yale, '94.....New Haven.
 Mountain, John Henry.....Jefferson, '96.....Middletown.
 Mullins, Samuel Frederick.....Bellevue, '06.....Danbury.
 Munger, Carl Eugene, Ph.B., Yale, '80.....P. & S., N. Y., '83.....Waterbury.
 Murdock, Thos. P.Balt. Med., '10.....Meriden.
 Murless, H. Walter.....Louisville Med. Coll., '93.....Guilford.
 Murphy, James.....Univ. Pa., '95.....Middletown.
 Murphy, John Aloysius.....N. Y. Univ., '97.....New Haven.
 Murphy, Walter Graham.....Albany Med. Coll., '90.....Hartford.
- Nadler, Alfred Goldstein, B.A., Yale, '93.....Yale, '96.....New Haven.
 Naylor, James Henry.....Univ. Vt., '95.....Hartford.
 Neary, Lawrence Dillon.....Georgetown, '13.....Torrington.
 Nemoitin, Julius.....P. & S., N. Y., '05.....Stamford.
 Nettleton, Francis Irving, Ph.B., Yale, '94.....Yale, '97.....Shelton.
 Nettleton, Irving LaField.....L. I. Hosp. Coll., '98.....Bridgeport.
 Newton, Cyrus Brownlee.....Yale, '56.....Stafford Springs.
 Nichols, Ralph W., Yale, '08.....Johns Hopkins, '12.....Montwese.
 Nickerson, Nehemiah.....N. Y. Med. Coll., '57.....Meriden.

- Nolan, Daniel Andrew, Ph.G., Phil., '93.....Med. Chir., Phila., '95....Middletown.
 Nolan, Jacob Matthew.....P. & S., Balt., '94.....Westport.
 North, Joseph Howard.....L. I. Hosp. Coll., '73.....Goshen.
 Notkins, Louis Adolph.....Yale, '03.....New Haven.
 Noxon, George Henry.....Balt. Med. Coll., '93.....Darlen.
 Nugent, Huggard W.Hahn, Phila., '10.....New Haven.

 Oher, George Eugene.....Univ. Vt., '90.....Bridgeport.
 O'Brien, Francis Joseph.....Fordham, '13.....Middletown.
 O'Brien, John F.Yale, '08.....Meriden.
 O'Brien, Joseph F.Univ. of Vt., '13.....Hartford.
 O'Brien, Thomas Augustine.....Yale, '02.....New Haven.
 O'Connell, Thomas Smith.....P. & S., Balt., '92.....East Hartford.
 O'Connor, Patrick Thomas.....Bellevue, '92.....Waterbury.
 Oelschlagel, H. C.Jefferson, '11.....Torrington.
 O'Flaherty, Ellen Pemhroke.....Cornell, '01.....Hartford.
 O'Hara, Bernard Augustine.....Bellevue, '82.....Waterbury.
 O'Hara, William James Aloysius.....P. & S., Balt., '93.....Bridgeport.
 O'Loughlin, Thomas Francis.....Univ. N. Y., '96.....Rockville.
 O'Neil, Owen.....Jeff., '04.....Willimantic.
 O'Neil, William Henry.....Balt. Med. Coll., '11.....Ansonia.
 Onderdonk, Harry Jay.....Univ. N. Y., '97.....East Hartford.
 Oshorn, George Wakeman, B.A., Yale, '84....P. & S., N. Y., '87.....Bridgeport.
 Oshorne, Oliver Thomas.....Yale, '84.....New Haven.
 O'Shaughnessy, Edmund Joseph.....Bellevue, '99.....New Canaan.
 Otis, Samuel Dickinson.....Univ. N. Y., '77.....Meriden.
 Overlock, Seldom Burden, B.A., Colhy, '86....Bellevue, '89.....Pomfret.
 Owens, William Thomas.....Univ. Vt., '99.....Hartford.

 Paine, Robert Child.....Dartmouth, '00.....Thompson.
 Page, C. I.P. & S., N. Y., '90.....Litchfield.
 Park, Charles Edwin.....Yale, '81.....New Haven.
 Parker, Edward Oliver, A.B., Harvard, '91....P. & S., N. Y., '96.....Greenwich.
 Parker, Spotswood Hayes.....Univ. of Va., '04.....Hartford.
 Parker, Theodore Raymond.....Univ. N. Y., '80.....Willimantic.
 Parlato, Michael Antonio.....Yale, '08.....Derby.
 Parmelee, Edward Kihhe.....L. I. Hosp. Coll., '89.....Ansonia.
 Partree, Homer Tomlinson.....Yale, '92.....Torrington.
 Patterson, Daniel Cleveland.....P. & S., Balt., '06.....Bridgeport.
 Peck, Frederick Johnson.....Univ. Mich., '92.....Ansonia.
 Peck, Robert Ellsworth, Ph.B., Yale, '90....Yale, '93.....New Haven.
 Peckham, Lucy Creemer.....Wom. Med. Coll., Pa., '85, New Haven.
 Pendleton, Cyrus Henry.....Western Reserve, '60.....Hebron.
 Perkins, Charles Harris.....P. & S., N. Y., '91.....Norwich.
 Perreault, Joseph Napoleon.....Tufts, '07.....Danielson.
 Perry, Edward Franklin.....L. I. Hosp. Coll., '97.....Putnam.
 Peters, H. LeBaron, B.A., Univ. N. B.McGill, '07.....Bridgeport.
 Petrocelli, Gerardo G.Univ. of Naples, '05.....Middletown.
 Phelps, Charles Dickinson, B.A., Amherst,
 '89; M.A., Amherst, '97.....P. & S., N. Y., '95.....West Haven.
 Phelps, Stuart E.McGill, '99.....Farmington.
 Philip, Rosaville Gardner.....Wom. Med. Coll., N. Y. Inf., '75, Stamford.
 Phillips, Alfred Noroton.....P. & S., N. Y., '83.....Stamford.
 Phillips, Frank Lyman, Ph.B., Yale, '02....Yale, '06.....New Haven.
 Pierce, Elhridge Worthington.....Univ. N. Y., '85.....Meriden.

- Pierson, John Corhin.....Tufts, '03.....Hartford.
 Pierson, Samuel.....P. & S., N. Y., '81.....Stamford.
 Pike, Ernest Reginald.....Univ. Mich., '98.....East Woodstock.
 Pinney, Almon William.....Hahn. Med. Coll., Phila., '00, Norfolk.
 Pinney, Royal Watson.....P. & S., N. Y., '88.....Derhy.
 Pitman, Edwin Parker, B.A., Dart., '86.....Dartmouth, '91.....New Haven.
 Platt, William Logan.....P. & S., N. Y., '81.....Torrington.
 Plumstead, Matthew Woodhury.....Jeff., '87.....East Haddam.
 Plunkett, Thomas F.L. I. Coll. Hosp., '08.....Derhy.
 Pomeroy, Nelson Asa.....P. & S., N. Y., '96.....Waterbury.
 Pons, Louis Jacques.....Univ. Vt., '85.....Milford.
 Porter, Donald Wallace, A.B., Yale.....Harvard, '12.....New Haven.
 Porter, George Loring, B.A., Brown, '59.....Jeff., '62.....Bridgeport.
 Porter, Isaac Napoleon, B.A., Lincoln, '90.....Yale, '93.....New Haven.
 Porter, William, Jr.Chicago Med. Coll., '81.....Hartford.
 Potter, Frank Edward.....P. & S., N. Y., '89.....Portland.
 Powers, Frederick.....P. & S., N. Y., '70.....Westport.
 Powers, John T. H.P. & S., Balt., '10.....Bridgeport.
 Pratt, Louis IrvingQue., '79.....Taftville.
 Pratt, Arthur Milon.....Bellevue, '92.....Deep River.
 Pratt, Edward Loomis.....Univ. N. Y., '84.....Winsted.
 Pratt, Elias.....P. & S., N. Y., '87.....Torrington.
 Pratt, Nathan Tolles, A.B., Trinity, '94;
 M.A., '97.....Yale, '04.....Bridgeport.
 Prince, Alexander Louis.....Yale, '10.....New Haven.
 Provost, Alva G.Yale, '05.....New Haven.
 Purdy, Alexander Marshall.....Univ. Mich., '84.....Mystic.
 Purinton, Charles Oscar, Ph.B., Yale, '97.....Yale, '00.....West Hartford.
 Purney, John.....Balt. Med. Coll., '06.....New Britain.
 Pyle, Francis Winthrop, A.B., Yale, '97.....P. & S., N. Y., '02.....Bridgeport.
 Quinlan, Raymond V.Balt. Med. Coll., '10.....Meriden.
 Quinn, John Francis.....Balt. Med. Coll., '06.....Bridgeport.
 Quinn, Raymond J.P. & S., Balt., '13.....Waterbury.
 Radom, Fannie.....Wom. Med. Coll., '12.....Hartford.
 Rand, Richard Foster, Ph.B., Yale, '95.....Johns Hopkins, '00.....New Haven.
 Randall, William Sherman, Ph.B., Yale, '83.....P. & S., N. Y., '86.....Shelton.
 Reardon, William F.Bellevue, '09.....Hartford.
 Reich, Upton Sharetts.....Univ. of Va., '09.....Bridgeport.
 Reidy, David Dillon.....Med. Chi., Phila., '09.....Winsted.
 Reidy, Maurice J.P. & S., N. Y., '10.....Winsted.
 Reilly, Francis Henry.....Yale, '97.....New Haven.
 Reilly, James Michael.....Yale, '78.....New Haven.
 Reinert, Emil Gustav.....Balt. Med. Coll., '05.....Hartford.
 Reynolds, Harry St. Clair.....Yale, '10.....New Haven.
 Reynolds, Harry Stephen.....Alhany Med., '14.....Hartford.
 Reynolds, William George, A.B., Yale, '95.....Yale, '97.....Woodhury.
 Rice, Richard W.Coll. Phys. & Surg., South Manchester.
 Rice, Watson Emmons.....Univ. Mich., '72.....Stamford.
 Richards, William Spencer.....Univ. N. Y., '89.....West Winsted.
 Richardson, Dwight A.Yale, '81.....Derhy.
 Rinde, Hamilton, N. Dakota, '02.....Johns Hopkins, '08.....Middletown.
 Rindge, Milo Pemher.....P. & S., Cleveland, '05.....Madison.
 Ring, Henry Wilson, A.B., Bowdoin, '79;
 M.A., Bowdoin, '82.....Me. Med. Coll., '87.....New Haven.

- Riordan, Michael Davitt.....Univ. of Vt., '12.....Waterbury.
 Rising, Harry Breed.....Yale, '95.....South Glastonbury.
 Robbins, Charles Henry.....Balt. Med. Coll., '95.....New Haven.
 Robbins, George Orrin.....Yale, '79.....Waterbury.
 Robbins, James Watson.....Bellevue, '80.....Naugatuck.
 Roberts, Albert Joseph.....Harvard, '02.....Bridgeport.
 Robinson, Joseph.....P. & S., N. Y., '98.....West Cornwall.
 Robinson, Myron Potter.....Yale, '95.....Windsor Locks.
 Robinson, Paul Skiff, Ph.B., Yale, '89.....Yale, '91.....New Haven.
 Robinson, Rienzi.....L. I. Hosp. Coll., '69.....Danielson.
 Roch, EmilienVictoria School, Montreal, North Grosvenordale.
 Roche, Thomas Joseph.....P. & S., Balt., '11.....Bridgeport.
 Rockwell, Thomas Francis.....Univ. N. Y., '81.....Rockville.
 Rodman, Charles Shepard.....P. & S., N. Y., '68.....Waterbury.
 Rogers, James Frederick.....Yale, '05.....New Haven.
 Rogers, Platt H.Yale, '12.....West Haven.
 Rogers, Thomas Weaver.....P. & S., N. Y., '90.....New London.
 Roller, Robert D., Jr., A.B., W. Va., '00.....Univ. Coll. Med., '05.....Bridgeport.
 Ronayne, Frank Joseph.....Yale, '04.....Hartford.
 Rooney, James Francis.....Balt. Med. Coll., '03.....Hartford.
 Root, Edward King.....Univ. N. Y., '79.....Hartford.
 Root, Joseph Edward, B.S., Boston Univ., '76.....P. & S., N. Y., '83.....Hartford.
 Ross, Donald Laurence....McGill, '87.....Mansfield Depot.
 Rowe, Michael Joseph.....P. & S., Balt., '96.....Bridgeport.
 Rowley, Alfred Merriman.....Univ. Vt., '97.....Hartford.
 Rowley, John Carter.....Harvard, '06.....Hartford.
 Rowley, Robert Lee.....Yale, '03.....Hartford.
 Ruland, Frederick Davis.....P. & S., N. Y., '89.....Westport.
 Russ, Henry Camp, B.A., Yale, '02.....Johns Hopkins, '06.....Hartford.
 Russell, Donald G.Yale, '14.....Wallingford.
 Russell, Edmund.....Univ. of Penn., '04.....Waterbury.
 Russell, George Washington.....Bellevue, '96.....Waterbury.
 Russell, Thomas H., Ph.B., Yale, '06.....Yale, '10.....New Haven.
 Russell, William Spencer.....Yale, '80.....Wallingford.
 Ryan, Joseph Patrick.....P. & S., N. Y., '03.....Hartford.
 Ryan, Patrick Joseph.....Niagara, '98.....Hartford.
 Ryan, Timothy Mayher, A.B., Loyola Coll....Balt. Med. Coll., '02.....Torrington.
 Ryder, Charles Ambler.....Yale, '98.....Brookfield Center.
 Ryder, Raymond H.P. & S., Balt., '13.....Waterbury.

 Sagarino, John F.P. & S., N. Y., '13.....Hartford.
 Sanford, Charles Edwin.....Yale, '06.....New Haven.
 Sanford, Leonard Cutler, B.A., Yale, '90.....Yale, '93.....New Haven.
 Sanford, Ward Harding.....Balt. Med. Coll., '95.....New Haven.
 Sansone, Nicola Maria.....Denver Med. Coll., '02.....Bridgeport.
 Scanlon, Thomas F.Yale, '07.....Bridgeport.
 Scarbrough, Marvin McRae, B.A., Univ. of
 Oregon, '02; M.A., Yale, '05.....Yale, '07.....New Haven.
 Schavoir, Frederick.....P. & S., Balt., '87.....Stamford.
 Scholl, Robert F.Yale, '12.....New Haven.
 Schuele, George J.Yale, '08.....Bridgeport.
 Schulz, Herman Samuel.....Hahn, Phila., '01.....Bridgeport.
 Scofield, Everett J. S.Univ. of N. C., '08.....Danbury.
 Scrimgeour, Arthur.....L. I. Coll. Hosp., '09.....Bridgeport.
 Sears, Cushman Allen.....Univ. N. Y., '62.....Portland.

Sedgwick, J. T.	Univ. N. Y., '81.....	Litchfield.
Segnalla, Ernest.....	Yale, '12.....	New Haven.
Segur, Gideon Cross.....	P. & S., N. Y., '82.....	Hartford.
Shannon, Thomas J.	Balt. Med., '99.....	Falls Village.
Sharpe, Elmer Thomas.....	Univ. N. Y., '95.....	Derby.
Sharpe, Harry Rabe.....	Univ. Vt., '00.....	Manchester.
Shea, John F.	P. & S., Balt., '11.....	Bridgeport.
Sheahan, Michael J.	Yale, '96.....	Derby.
Sheahan, William L., Jr.	P. & S., Balt., '12.....	New Haven.
Shelton, Gould Abijah, M.A., Yale, '91.....	Yale, '69.....	Shelton.
Sherer, Henry Clifford.....	Univ. N. Y., '92.....	South Norwalk.
Sherman, Florence A.	Wom. Med. Coll., '91.....	Bridgeport.
Sherrill, George.....	P. & S., '91.....	Stamford.
Shirk, Samuel Martin.....	Hahn., Phila., '97.....	Stamford.
Simmons, Willard Nelson.....	Univ. Vt., '89.....	Tolland.
Simonds, Clarence Eugene.....	Univ. N. Y., '97.....	Willimantic.
Simonton, Frank F.	Me. Med. Sc., '03.....	Thompsonville.
Simpson, Frederick Thomas, B.A., Yale, '79.....	Me. Med. Coll., '84.....	Hartford.
Skiff, Francis Sands.....	Univ. N. Y., '88.....	Falls Village.
Skiff, Stuart E.	Hahn., Phila., '03.....	New Haven.
Skiff, Walter C.	N. Y. Hom. Coll., '83.....	New Haven.
Skinner, Clarence Edward, LL.D., Rutherford, N. C., '00.....	Yale, '91.....	New Haven.
Slattery, Morris 'Dove.....	Yale, '93.....	New Haven.
Slemons, J. Morris.....	Johns Hopkins, '01.....	New Haven.
Sloan, Thomas George.....	P. & S., N. Y., '99.....	South Manchester.
Smail, Martin L.	Univ. Vt., '93.....	Mystic.
Smirnow, Max Ruskin.....	Yale, '06.....	New Haven.
Smith, Arthur Charles.....	P. & S., Balt., '10.....	Danbury.
Smith, Charles.....	L. I. Hosp. Coll., '90.....	Riverside.
Smith, Charles F.	N. Y. Homeo. Coll., '84.....	Wallingford.
Smith, David Parker, A.B., Yale, '10.....	Yale, '12.....	Meriden.
Smith, Dorland, A.B., Yale, '96.....	Yale, '99.....	Bridgeport.
Smith, Earl Terry, M.A., Trinity, '03 Hon.	Yale, '97.....	Hartford.
Smith, Edwards Montrose.....	P. & S., N. Y., '82.....	Bridgeport.
Smith, Edward Weir, A.B., Yale, '78.....	McGill, Mont., '82.....	Meriden.
Smith, Egbert Livingston.....	Yale, '96.....	Waterbury.
Smith, Ernest Herman, A.B., Amherst, '85.....	P. & S., N. Y., '89.....	Redding.
Smith, Frederic DeWitt.....	Hahn., '10.....	Guilford.
Smith, Frank Lewis.....	Univ. N. Y., '75.....	Stafford Springs.
Smith, Frank Llewellyn.....	Albany, '83.....	Bridgeport.
Smith, Fred M.	Univ. Vt., '11.....	Willimantic.
Smith, Frederick Sumner, B.A., Yale, '79.....	Yale, '82.....	Chester.
Smith, George Arthur, A.B., Yale, '03.....	Johns Hopkins, '07.....	Stepney.
Smith, Henry Hubert.....	Jefferson, '77.....	New Haven.
Smith, Marvin.....	Univ. N. Y., '83.....	New Haven.
Smith, Newton Phineas.....	P. & S., N. Y., '82.....	Norwich.
Smith, William E.	Univ. Mich., '10.....	Stamford.
Smykowski, Bronislaw Louis.....	Balt. Med., '11.....	Bridgeport.
Smyth, Herbert Edmund.....	McGill Univ., '84.....	Bridgeport.
Sperry, Frederick Noyes.....	Yale, '94.....	New Haven.
Spicer, Edmund.....	Yale, '05.....	Waterbury.
Spier, Seymour Leopold.....	Yale, '04.....	New Haven.
Sprague, Charles Harry.....	P. & S., N. Y., '04.....	Bridgeport.
Standish, Frank Billings.....	Yale, '03.....	New Haven.

- Standish, James Herbert.....Univ. N. Y., '95.....Hartford.
Stanley, Charles Everett.....Univ. Pa., '76.....Middletown.
Stanton, John Gilman, B.A., Amherst, '70.....Wurtzburg, '73.....New London.
Starr, Robert Sythoss, B.A., Trinity, '97;
M.A., '00.....P. & S., N. Y., '01.....Hartford.
Staub, George Edwards.....L. I. Hosp. Coll., '93.....New Milford.
Staub, John Howard.....L. I. Hosp. Coll., '99.....Stamford.
Steadman, Willard George.....Bellevue, '74.....Southington.
Steele, Henry Merriman, Ph.B., Yale, '94.....Johns Hopkins, '02.....New Haven.
Steinberger, Maurice, B.A., Coll. Colvensic
'83, Royal Hun. Univ., Buda Pesth, '89,....N. Y. Med. Coll., '09.....Bridgeport.
Steiner, Walter Ralph, A.B., Yale, '92;
M.A., Yale, '95.....Johns Hopkins, '98.....Hartford.
Stilphen, Harry Leslie.....Univ. of Vt., '13.....Shelton.
Stern, Charles Seymour, A.B., C. C. N. Y....Bellevue, '91.....Hartford.
Stetson, James Ebenezer.....Yale, '81.....New Haven.
Stetson, Paul R.Yale, '02.....New Haven.
Stevens, Carrie North.....Tufts, '98.....West Cornwall.
Stevens, Frank William.....Yale, '00.....Bridgeport.
Stevens, H. G.Balt., '04.....New Preston.
Stewart, Harry Eaton.....Yale, '10.....New Haven.
Stockwell, William Myron.....Univ. of Penn., '04.....Shelton.
Stoll, Henry Farnum.....P. & S., N. Y., '02.....Hartford.
Storrs, Eckley Raynor.....Jeff., '90.....Hartford.
Stratton, Edward Augustus.....Univ. N. Y., '83.....Danbury.
Stretch, James.....Univ. Coll., Richmond, Va., '02, Stafford Springs.
Strohel, Joseph E.Temple, '09.....Hartford.
Strosser, Herman.....Univ. Berlin, '84.....New Britain.
Sullivan, Daniel.....Univ. N. Y., '97.....New London.
Sullivan, Daniel Francis, A.B., Niagara
Univ., '89.....Niagara Univ., '91.....Hartford.
Sullivan, Jeremiah Bartlett, Yale, '03.....Yale, '06.....New Haven.
Sullivan, John Francis, B.A., Yale, '90.....P. & S., N. Y., '94.....New Haven.
Sullivan, Michael Joseph.....Cornell, '00.....Meriden.
Sunderland, Paul Ulysses.....N. Y. Hom. Med., '94.....Danbury.
Swain, Henry Lawrence.....Yale, '84.....New Haven.
Swan, Horace Cheney.....Tufts, '03.....Hartford.
Sweet, Grover C.P. & S., Balt., '12.....New Haven.
Sweet, John H. T.Tufts, '12.....Hartford.
Swenson, Andrew Clay.....Yale, '02.....Waterbury.
Swett, Paul Plummer.....Univ. N. Y., '04.....Hartford.
- Taft, Charles Ezra.....Harvard, '86.....Hartford.
Tanner, Alfred Herbert.....Bellevue, '74.....Wauregan.
Taylor, John Clifton.....Univ. Mich., '91.....New London.
Taylor, Maude Winifred.....Tufts, '05.....Hartford.
Teele, Julia Ernestine, A.B., Tabor, '85.....Wom. Med. Coll., Pa., '88, New Haven.
Tenney, Arthur John, Ph.B., Yale, '77.....Yale, '83.....Branford.
Thibault, Louis Joseph.....Yale, '00.....Waterbury.
Thielke, George Emanuel.....Yale, '10.....Danbury.
Thomson, Thomas Leonard.....Hahn, Phil., '01.....Torrington.
Thompson, Emma Jane.....Wom. Med. Coll., N. Y., Inf., '06, Hartford.
Thompson, George.....Me. Med. Coll., '89.....Taftville.
Thompson, Whitefield Nelson, A.B., Bates, '88, Jefferson, '89.....Hartford.
Tileston, Wilder, Harvard, '95.....Harvard, '99.....New Haven.

- Tingley, Witter Kinney.....Bellevue, '86.....Norwich.
 Tinker, William Richard.....Univ. N. Y., '80.....South Manchester.
 Tolles, Burton Isaac, A.B., Yale, '01.....Yale, '04.....Ansonia.
 Topping, Jacob Reed.....Univ. N. Y., '82.....Bridgeport.
 Townsend, Charles Rodman.....Albany, '95.....Bridgeport.
 Townsband, Raynham, Ph.B., Yale, '00.....P. & S., N. Y., '05.....New Haven.
 Tracey, Dwight Wallace, Ph.B., Yale, '04.....Johns Hopkins, '08.....Hartford.
 Tracey, William Josepb.....Univ. N. Y., '89.....Norwalk.
 Tracy, Andrew William.....McGill, '73.....Meriden.
 Tracy, Robert Graham.....Yale, '00.....New Haven.
 Treat, William Howard.....Yale, '06.....Derby.
 Trecartin, David Munson.....Dartmouth, '94.....Bridgeport.
 Truex, Edward Hamilton.....Univ. Louisville, '08.....East Hartford.
 Tuch, Morris.....Bellevue, '06.....Hartford.
 Tukey, Frank Martin, B.A., Bowdoin, '91.....Harvard, '94.....Bridgeport.
 Turbert, Edward Joseph.....Balt. Med. Coll., '04.....Hartford.
 Turkington, Charles Henry, Ph.B., Yale, '03.....Johns Hopkins, '07.....N. Y. City.
 Turner, Arthur Robert, A.B., Amherst, '84.....Univ. Paris, '94.....Norwalk.
 Turrill, Henry Smith, Ph.B., Yale, '06.....Yale, '10.....Canaan.
 Tuttle, Albert Lake.....Albany, '88.....Kent.
 Tuttle, Charles Alling, Ph.B., Yale, '88.....Yale, '90.....New Haven.
 Tuttle, Frank James.....Univ. Vt., '98.....Naugatuck.
 Tynan, James Josepb.....P. & S., Balt., '07.....Torrington.
- Vail, Edwin S.N. Y. Homeo. Med. Coll., '82..Tbompsonville.
 Vail, George Francis, B.S., Villanova, '98.....Univ. Pa., '02.....Hartford.
 Vail, Thornton E.Johns Hopkins '11, Ph.B. Yale, '07..Collinsville.
 VanStrander, William Harold.....Univ. Vt., '00.....Hartford.
 Van Vleet, Peter P.Bellevue, '69.....Stamford.
 Variell, Arthur.....Bowdoin, '94.....Waterbury.
 Vastola, Anthony P.Fordbam, '12.....Waterbury.
 Verdi, William Francis.....Yale, '94.....New Haven.
 Vernlund, Carl F., B.S. South Dakota State, '09, Howard, '14.....Hartford.
- Wadbams, Sanford Hosea.....Yale, '96.....Torrington.
 Waite, Frank Louis.....Bellevue, '88.....Hartford.
 Waite, Robert L., Ph.B., '05.....Johns Hopkins, '09.....Hartford.
 Wales, Francis Josepb.....N. Y. Univ., '97.....Stepney Depot.
 Walsb, Frederick William.....P. & S., Balt., '85.....Rockville.
 Walsb, Josepb William.....P. & S., Balt., '07.....Danbury.
 Walsb, Thomas Patrick.....Univ. Vt., '02.....Middletown.
 Ward, James Ward.....P. & S., Balt., '95.....Hartford.
 Warner, Charles Norton.....Jeff., '96.....Litchfield.
 Warner, George Howell.....Yale, '97.....Bridgeport.
 Wason, David Boughton.....P. & S., N. Y., '00.....Bridgeport.
 Waterhouse, Henry Edwin.....P. & S., N. Y., '02.....Bridgeport.
 Waterman, Paul.....Cornell, '02.....Hartford.
 Waters, John Bradford.....Univ. Vt., '90.....Hartford.
 Watson, William Clark.....L. I. Hosp. Coll., '97.....Bridgeport.
 Watson, William Seymour.....L. I. Hosp. Coll., '87.....Danbury.
 Weadon, William Lee.....Va. Med. Coll., '05.....Bridgeport.
 Weed, Floyd Albert.....Albany, '12.....Torrington.
 Weidner, Calvin.....Univ. Ind., '93.....Hartford.
 Weir, Janet Marshall.....Queen's Univ., Kingston, Ont., '91, Hartford.
 Welch, George Kellogg.....P. & S., N. Y., '78.....Hartford.

- Welch, Harry Little, A.B., Yale, '94.....Yale, '97.....New Haven.
 Welch, Thomas Francis.....Georgetown, '04.....Hartford.
 Welch, William Collins.....Yale, '77.....New Haven.
 Welden, Edwin B.P. & S., Balt., '13.....Bridgeport.
 Weldon, Thomas Henry.....Univ. N. Y., '83.....South Manchester.
 Wellington, William Winthrop.....Univ. Vt., '89.....Terryville.
 Wells, Donald B.Johns Hopkins, '12.....Hartford.
 Wells, Ernest Alden, A.B., Yale, '97.....Johns Hopkins, '01.....Hartford.
 Wersebe, Frederick William.....Univ. N. Y., '98.....Washington.
 West, Redfield Benjamin.....Univ. N. Y., '79.....Guilford.
 Westervelt, Marvin Zahriskie.....Homeo., N. Y., '99.....Litchfield.
 Wheatley, Louis Frederick.....Tufts, '03.....Meriden.
 Wheeler, Frank Henry, B.A., Yale, '80.....Yale, '82.....New Haven.
 Wheelock, Albert Andrews.....Univ. Vt., '97.....New Canaan.
 Whipple, Benedict Nolasco.....Yale, '07.....Bristol.
 White, Benjamin Walker.....L. I. Hosp. Coll., '86.....Bridgeport.
 White, Robert Creighton.....Univ. Vt., '89.....Willimantic.
 Whiting, Leonard C.Md. Med. Coll., '12.....New Haven.
 Whittemore, Edward Reed, A.B., Yale, '98...P. & S., N. Y., '02.....New Haven.
 Whittemore, Frank Hamilton.....Bellevue, '74.....New Haven.
 Wiedman, Otto George.....Univ. Pa., '05.....Hartford.
 Wight, George DeWitt.....Bellevue, '87.....Bethel.
 Williams, Charles Mallory.....P. & S., N. Y., '98.....Stonington.
 Wilmot, Louis Howard.....Univ. N. Y., '91.....Ansonia.
 Wilson, Frank E.Univ. Vt., '11.....Montville.
 Wilson, Frederick Morse, A.B., Colby, '71...Harvard, '75.....Bridgeport.
 Wilson, James Cornelius.....Univ. Vt., '04.....Hartford.
 Wilson, Leslie A.Yale, '10.....Meriden.
 Wilson, McLeod C.Cornell Med. Sc., '04...West Hartford.
 Wilson, William Patrick.....P. & S., Balt., '90.....Wallingford.
 Winne, William Nelson.....N. Y. Univ., '97.....New Haven.
 Winship, Ernest Oliver.....Univ. Vt., '00.....New London.
 Witter, Orin Russell.....P. & S., N. Y., '01.....Hartford.
 Wolff, Arthur Jacob.....Tex. Med. Coll., '76, Bellevue, '83, Hartford.
 Woodford, Chester N.Univ. Louisville, '08.....Naugatuck.
 Woodward, Harold B., B.A. Wesleyan.....Johns Hopkins, '02.....Terryville.
 Wooster, Charles Morris.....Univ. N. Y., '79.....Tariffville.
 Worthen, Thatcher Washburn.....Dartmouth, '11.....Hartford.
 Wright, Arthur B.P. & S., N. Y., '95.....Hartford.
 Wright, Frank Walden.....Bellevue, '80.....New Haven.
 Wright, George Herman.....P. & S., N. Y., '94.....New Milford.
 Wright, John Winthrop, A.B., Amherst, '77...Univ. N. Y., '80.....Bridgeport.
 Wright, Theodore Goodelle.....Univ. N. Y., '65.....New Britain.
 Wurtenberg, William Charles, Ph.B., Yale, '89.Yale, '93.....New Haven.

 Yergason, Rohert M.P. & S., Balt., '09.....Hartford.
 Young, Charles Bellamy.....P. & S., N. Y., '94.....Middletown.
 Young, James F.P. & S., N. Y., '13.....New London.
 Young, Thomas H.Yale, '95.....New Haven.

 Zink, Charles Edwin, A.B., Balt. Univ.Balt. Univ., '00.....Durham.

